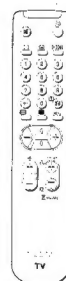
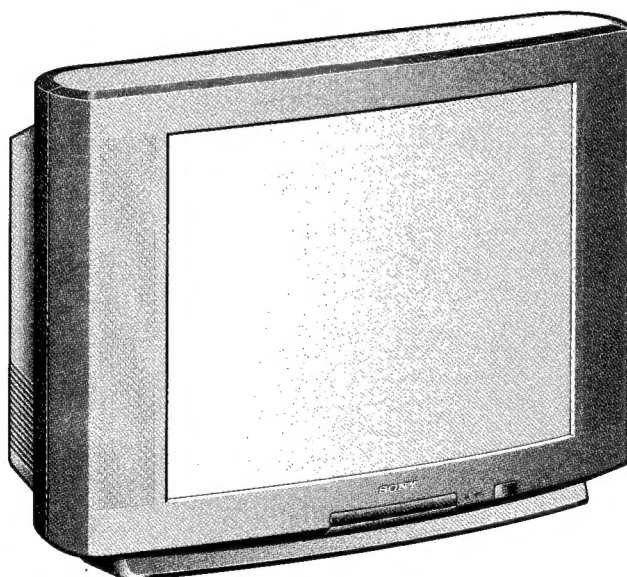


SERVICE MANUAL

FE-1 CHASSIS

| MODEL | COMMANDER | DEST | CHASSIS NO. | MODEL | COMMANDER | DEST | CHASSIS NO. |
|-----------------|-----------|---------|-------------|-----------------|-----------|---------|-------------|
| KV-25C5A | RM-883 | Italian | SCC-Q06F-A | KV-29C5A | RM-883 | Italian | SCC-Q06D-A |
| KV-25C5B | RM-883 | French | SCC-Q02F-A | KV-29C5B | RM-883 | French | SCC-Q02D-A |
| KV-25C5D | RM-883 | AEP | SCC-Q04F-A | KV-29C5D | RM-883 | AEP | SCC-Q04D-A |
| KV-25C5E | RM-883 | Spanish | SCC-Q05F-A | KV-29C5E | RM-883 | Spanish | SCC-Q05D-A |
| KV-25C5K | RM-883 | OIRT | SCC-Q03G-A | KV-29C5K | RM-883 | OIRT | SCC-Q03C-A |
| KV-25C5R | RM-883 | OIRT | SCC-Q03H-A | KV-29C5R | RM-883 | OIRT | SCC-Q03D-A |



TRINITRON® COLOR TV
SONY®

KV-25C5/29C5

| ITEM MODEL | Television System | Stereo System | Channel Coverage | Color System |
|------------|-------------------|---|---|--|
| Italian | B/G/H | GERMAN Stereo | ITALIA VHF : A-H2 (C) UHF : 21-69 PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 | PAL NTSC4.43, NTSC3.58 (VIDEO IN) |
| French | B/G/H, D/K, L, I | GERMAN/NICAM Stereo | L VHF : F02-F10 UHF : F21-F60 CABLE : B-Q B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 I UHF : B21-B69 | PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| AEP | B/G/H, D/K | GERMAN Stereo | PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 D/K VHF : R01-R12 UHF : R21-R69 | PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| Spanish | B/G/H, D/K | GERMAN/NICAM Stereo | PAL B/G VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 | PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |
| OIRT | B/G/H, D/K | KV-25C5K/29C5K GERMAN/NICAM STEREO KV-25C5R/29C5R GERMAN STEREO | B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 D/K VHF : R01-R12 UHF : R21-R69 | PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN) |

| MODEL | 25C5A | 25C5B | 25C5D | 25C5E | 25C5K | 25C5R | 29C5A | 29C5B | 29C5D | 29C5E | 29C5K | 29C5R |
|-------------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| Power Consumption | 89W | 97W | 97W | 97W | 97W | 97W | 100.1W | 108W | 108W | 108W | 108W | 108W |

[PICTURE TUBE]

KV-25C5

Super Trinitron
Approx. 63cm (25 inches)
(Approx. 59cm picture measured diagonally)
110 degree deflection

KV-29C5


Super Trinitron
Approx. 72cm (29 inches)
(Approx. 68cm picture measured diagonally)
110 degree deflection

Input/Output Terminals

[REAR]

 21-pin Euro connector (CENELEC standard).

- Inputs for Audio and Video signals.
- Inputs for RGB.
- Outputs of TV Video and Audio signals.


 21-pin Euro connector.


- inputs for Audio and Video signals.
- inputs for S Video.
- outputs for Audio and Video signals (selectable).


 Phono Jack


- Outputs for Audio Signals

[FRONT]

 2 Video input - phono jack

 2 Audio inputs - phono jacks

 S Video input 4 pin DIN

 Headphone jacks : stereo minijack

Sound output 2 x 20W (Music Power)

Power requirements 220 - 240V

Dimensions

KV-25C5 Approx 717x507x494mm

KV-29C5 Approx 794x567x545mm

Weight

KV-25C5 Approx 33kg

KV-29C5 Approx 43kg

Supplied accessories

RM-883 Remote Commander (1)

IEC designated R6 battery (1)

Other features

NICAM*, FASTEXT, TEXT

*(KV-25C5B/25C5E/25C5K/
29C5B/29C5E/29C5R only)

[RM-883]

Remote control system infrared control

Power requirements 1.5V dc

1 battery IEC designation

R6 (size AA)

Dimensions



Approx 65x225x21mm w/h/d

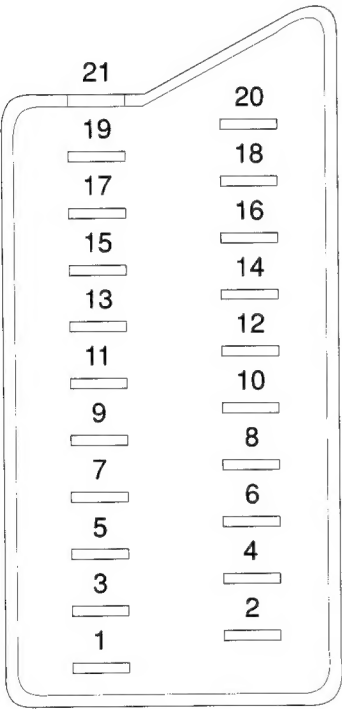
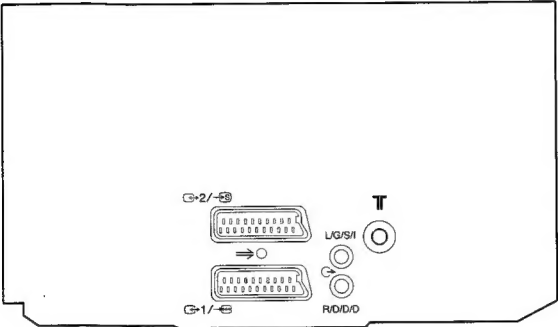
Weight

Approx 157g (Not including battery)

Design and specifications are subject to change without notice.

| Model Name Item | KV-25C5A KV-29C5A | KV-25C5B KV-29C5B | KV-25C5D KV-29C5D | KV-25C5E KV-29C5E | KV-25C5K KV-29C5K | KV-25C5R KV-29C5R |
|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Pal Comb | OFF | OFF | OFF | OFF | OFF | OFF |
| PIP | OFF | OFF | OFF | OFF | OFF | OFF |
| RGB Priority | OFF | OFF | OFF | ON | OFF | OFF |
| Woofer Box | OFF | OFF | OFF | OFF | OFF | OFF |
| Scart 1 | ON | ON | ON | ON | ON | ON |
| Scart 2 | ON | ON | ON | ON | ON | ON |
| Front In (3) | ON | ON | ON | ON | ON | ON |
| Scart 4 | OFF | OFF | OFF | OFF | OFF | OFF |
| Projector | OFF | OFF | OFF | OFF | OFF | OFF |
| AKB in 16:9 mode | ON | ON | ON | ON | ON | ON |
| Norm B/G/H | ON | ON | ON | ON | ON | ON |
| Norm I | OFF | ON | OFF | OFF | OFF | OFF |
| Norm D/K | OFF | ON | ON | ON | ON | ON |
| Norm AUS | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm L | OFF | ON | OFF | OFF | OFF | OFF |
| Norm SAT | OFF | OFF | OFF | OFF | OFF | OFF |
| Norm M | OFF | OFF | OFF | OFF | OFF | OFF |
| Teletext | ON | ON | ON | ON | ON | ON |
| Nicam Stereo | OFF | ON | OFF | ON | ON | OFF |
| Language Preset | Italian | French | German | Spanish | OIRT | OIRT |

21 pin connector ( 1 /  2)



| Pin No | 1 | 2 | 4 | Signal | Signal level |
|--------|-----------------------|----------------------------------|----------------------------------|------------------------------|---|
| 1 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Audio output B (right) | Standard level : 0.5V rms Output impedance : Less than 1kohm* |
| 2 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Audio output B (right) | Standard level : 0.5V rms Output impedance : More than 10kohm* |
| 3 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Audio output A (left) | Standard level : 0.5V rms Output impedance : Less than 1kohm* |
| 4 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Ground (audio) | |
| 5 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Ground (blue) | |
| 6 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Audio input A (left) | Standard level : 0.5V rms Output impedance : More than 10kohm* |
| 7 | <input type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | Blue input | 0.7 +/- 3dB, 75 ohms positive |
| 8 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Function select (AV control) | High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedance : More than 10K ohms Input capacitance : Less than 2nF |
| 9 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Ground (green) | |
| 10 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Open | |
| 11 | <input type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | Green | Green signal : 0.7 +/- 3dB, 75 ohms, positive |
| 12 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Open | |
| 13 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Ground (red) | |
| 14 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Ground (blanking) | |
| 15 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Red input | 0.7 +/- 3dB, 75 ohms, positive |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | (S signal Chroma input) | 0.3 +/- 3dB, 75 ohms, positive |
| 16 | <input type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | Blanking input (Ys signal) | High state (1-3V) Low state (0-0.4V) Input impedance : 75 ohms |
| 17 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Ground (video output) | |
| 18 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Ground (video input) | |
| 19 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Video output | 1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB) |
| 20 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Video input | 1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB) |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Video input Y (S signal) | 1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB) |
| 21 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Common ground (plug, shield) | |

☐ Connected ☒ Not Connected (open) * at 20Hz - 20kHz

| Pin No | Signal | Signal level |
|--------|--------------------|--|
| 1 | Ground | |
| 2 | Ground | |
| 3 | Y (S signal) input | 1V +/- 3dB 75 ohm, positive Sync 0.3V -3/+10dB |
| 4 | C (S signal input | 0.3V +/- 3dB 75 ohm, positive Sync |

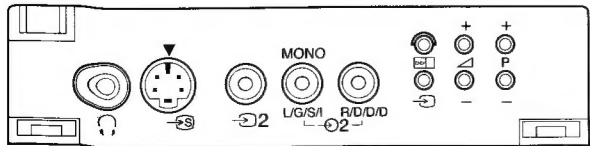


TABLE OF CONTENTS

| Section | Title | Page | Section | Title | Page |
|------------------------------|--------------------------------|------|---------------------------------|-------------------------------|------|
| 1. GENERAL | | | 4. CIRCUIT ADJUSTMENTS | | |
| | Overview of TV buttons | 6 | 4-1. | Electrical Adjustments | 20 |
| | Using Select Mode | 6 | 4-2. | Test Mode 2 | 23 |
| | Adjusting the Picture | 7 | 4-3. | FE-1 Self Diagnostic Software | 24 |
| | Adjusting the Sound | 7 | | | |
| | Using the Sleep Timer | 8 | 5. DIAGRAMS | | |
| | Viewing Teletext | 8 | 5-1. | Block Diagram | 25 |
| | Exchanging Programme Pos | 9 | 5-2. | Circuit Board Location | 32 |
| | Manually Tuning the TV | 9 | 5-3. | Schematic Diagrams and | |
| | Fine-Tuning Channels | 10 | | Printed Wiring Boards | 32 |
| | Using Optional Equipment | 10 | | * S1 Board | 34 |
| | Troubleshooting | 11 | | * A Board | 41 |
| | Specifications | 11 | | * VM Board (KV-29C5 only) | 46 |
| | | | | * C Board | 49 |
| | | | | * H1 Board | 51 |
| 2. DISASSEMBLY | | | 5-4. | Semiconductors | 53 |
| 2-1. | Rear Cover Removal | 12 | 5-5. | IC Blocks | 55 |
| 2-2. | Chassis Assy Removal | 12 | | | |
| 2-3. | Service Position | 13 | 6. EXPLODED VIEWS | | |
| 2-4. | H1 Board Removal | 13 | 6-1. | Chassis | 56 |
| 2-5. | S1 Board Removal | 13 | 6-2. | Picture Tube | 57 |
| 2-6. | Picture Tube Removal | 14 | | | |
| 2-7. | Removal and Replacement of the | | 7. ELECTRICAL PARTS LIST | | |
| | Main - Bracket bottom plates | 15 | | | 58 |
| 3. SET-UP ADJUSTMENTS | | | | | |
| 3-1. | Beam Landing | 16 | | | |
| 3-2. | Convergence | 17 | | | |
| 3-3. | Screen [G2] White Balance | 19 | | | |
| 3-4. | Focus | 19 | | | |


CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.


ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINT E SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS LA SÉCURITÉ !!

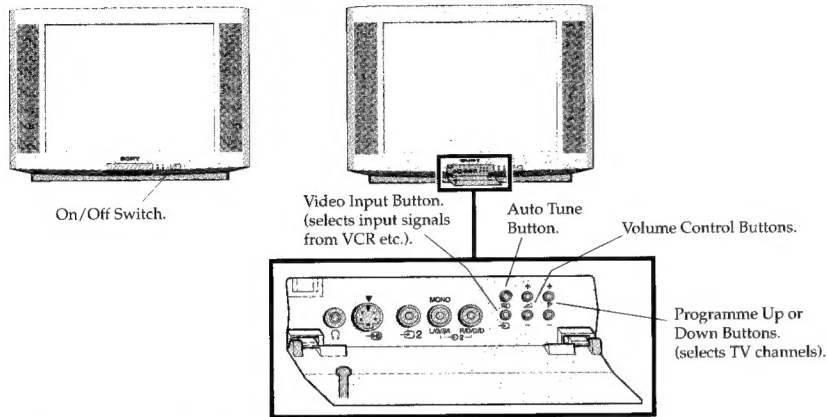
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Basic TV Features

Overview of TV Buttons



Overview of Remote Control Buttons

To Mute Sound

Press to mute TV sound. Press again to restore the sound.

To Select Channels

Press to select channels.

For double-digit programme numbers, e.g. 23, press -/- first, then the buttons 2 and 3.

To Change Screen Format

Press to view programmes in 16:9 mode. Press again to return to 4:3 mode.

To Adjust TV Volume

Press to adjust the volume of the TV.

To Temporarily Switch Off TV

Press to temporarily switch off TV. Press again to switch on TV from standby mode.

To save energy we recommend switching off completely when TV is not in use.

NOTE: After 15 - 30 minutes without a TV signal and without any button being pressed, the TV switches automatically into standby mode.

To Reveal On Screen Information

Press to reveal all on-screen indications. Press again to cancel.

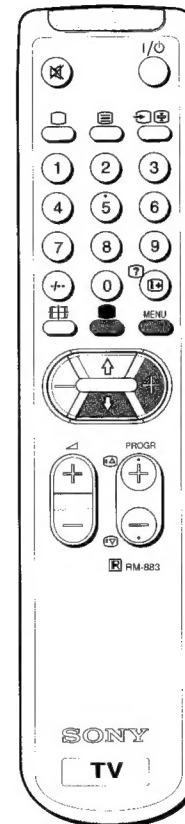
To Select Channels

Press to select channels.


Additional TV Features

Using Select Mode




You can select different preset picture and sound modes.



1 Press the MENU button on the remote control to display the menu on the TV screen.

2 With the cursor pointing at the  symbol on the TV screen as shown, press the yellow button.


3 Press the blue button to select the desired mode:


-  Personal Mode - reverts to settings made in "Adjusting the Picture and Sound" sections of the manual
-  Movie Mode - for films
-  Live Mode - for live broadcast programmes

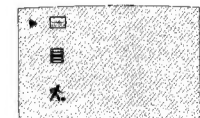
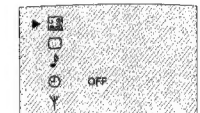
4 Press the MENU button to remove the menu display from the TV screen.

Note: The mode selected in step 3 is now stored.

Changing Modes Quickly

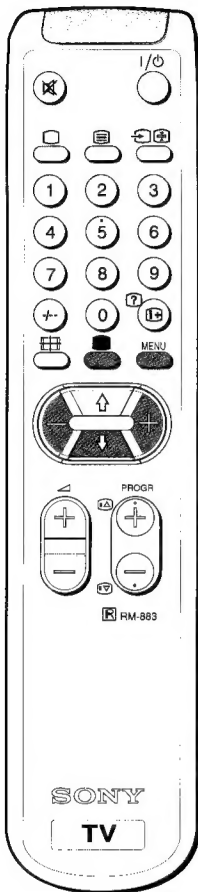
1 Press the  button on the remote control to display the three different modes.




2 Press the  button again to select your desired mode.











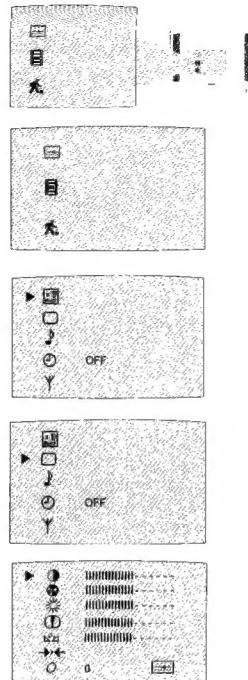
Adjusting the Picture

Although the picture is adjusted at the factory, you can modify it to suit your own requirement.



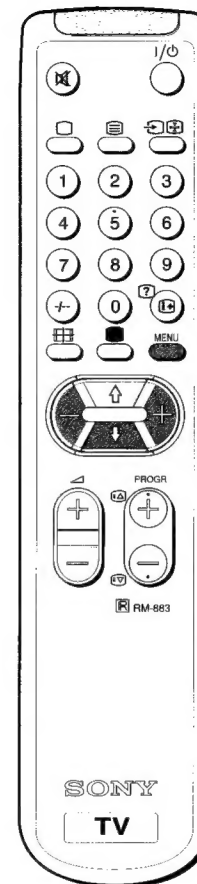
- 1 Press the  button on the remote control to display the three different modes on the TV screen.
- 2 Press the  button to highlight the personal mode symbol as shown.
- 3 Press the MENU button to display the menu on the TV screen.
- 4 Press the blue button on the control to select the  symbol on the TV screen then press the yellow button.
- 5 Press the blue button to select the item you wish to change (see below).
- 6 Press the red or yellow button to alter the selected item.
- 7 Press the MENU button to remove the menu display from the TV screen.




| Symbol | Item |
|---|---|
|  | • Contrast |
|  | • Colour |
|  | • Brightness |
|  | • Sharpness |
|  | • Hue control (only for NTSC video signals) |
|  | • Reset - resets to factory preset picture level |
|  | • Picture rotation - adjusts picture tilt (only for KV-29C5D model) |
|  | • Represents the mode selected in the "Using Select Mode" section. |

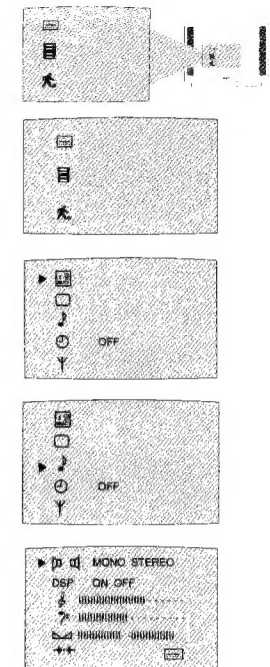








Adjusting the Sound

Although the sound is adjusted at the factory, you can modify it to suit your own requirement.



- 1 Press the  button on the remote control to display the three different modes on the TV screen.
- 2 Press the  button to highlight the personal mode symbol as shown.
- 3 Press the MENU button to display the menu on the TV screen.
- 4 Press the blue button to select the  symbol on the TV screen then press the yellow button.
- 5 Press the blue button to select the item you wish to change (see below).
- 6 Press the red or yellow button to alter the selected item.
- 7 Press the MENU button to remove the menu display from the TV screen.

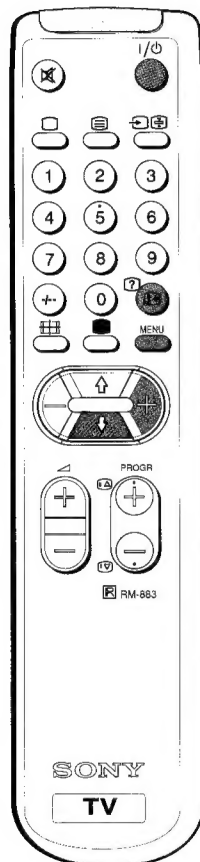


| Symbol | Item |
|---|--|
|  | • Mono sound/Stereo sound A: Channel 1 sound/B: Channel 2 sound (to select your desired language from a dual sound broadcast) |
| DSP | • On/Off (digital sound processor) |
|  | • Treble |
|  | • Bass |
|  | • Balance |
|  | • Reset (resets to factory preset sound level) |
|  | • Represents the mode selected in the "Using Select Mode" section of the manual. |

Additional TV Features


Using the Sleep Timer

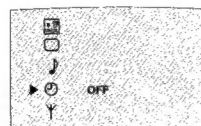
The TV may be set to switch automatically to the standby mode after a length of time chosen by you. You may set the time in 15 minute steps up to 4 hours.



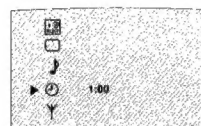
1 Press the MENU button on the remote control to display the menu on the TV screen.



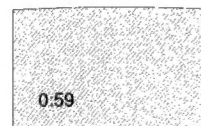
2 Press the blue button on the control to select the  symbol on the TV screen, then press the yellow button.



3 Press the yellow button repeatedly until the required amount of time delay appears on the screen.





4 Once the time delay has been selected, press the MENU button to remove the on-screen display.



One minute before standby, the display shown appears on the screen.

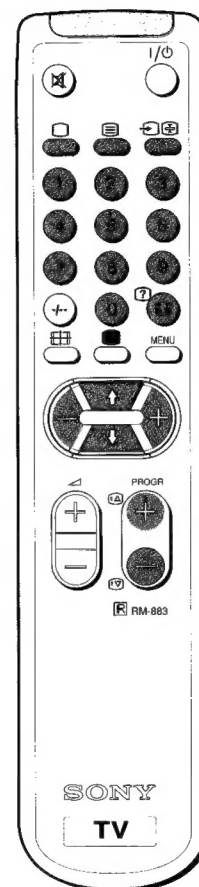
Notes:

- When watching TV, press the  button to display time remaining.
- To return to normal operation from standby mode, press the  button.

Additional TV Features


Viewing Teletext

Teletext is an information service transmitted by most TV stations.




Selecting Teletext

1 Press a number button on the remote control to select the channel which carries the teletext service you wish to receive.

2 Press the  button on the remote control to switch on teletext.

3 Input three digits for the page number using the numbered buttons on the control.


4 Press the  button to switch off teletext.


Note: Teletext errors may occur if the broadcasting signals are weak.



Using Other Teletext Functions

To Superimpose Teletext on to the TV


Press  once in teletext mode or twice in TV mode to superimpose teletext on to the TV screen.


Press  again to cancel teletext mode.

To Move to Next or Preceding Page


Press PROG + / - on the remote control to select the previous or next page.

To Freeze a Teletext Page

Press  on the control to freeze the page.

Press  again to cancel the freeze.

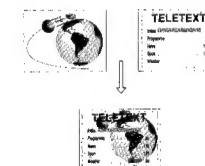
Revealing concealed information (eg: answers to a quiz).

Press  to reveal information.

Press again to conceal the information.

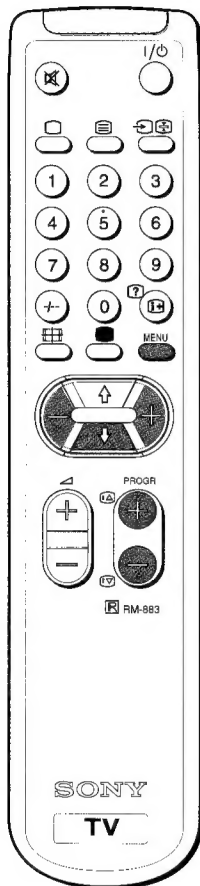
Using colour buttons to access pages (Fastext)

When the colour coded menu appears at the bottom of a page, press the colour button (green, red, yellow or blue) to access the corresponding page.

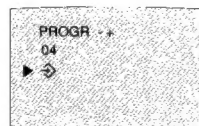
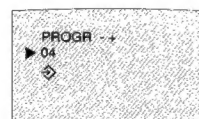
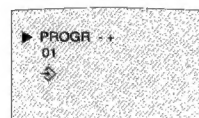
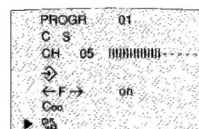
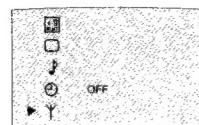
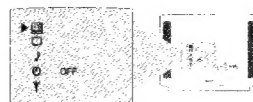


Exchanging Programme Positions

After tuning you may wish to change the order in which the channels appear on the TV. You may wish for example to exchange the channel on programme number 8 with the channel on programme number 4.

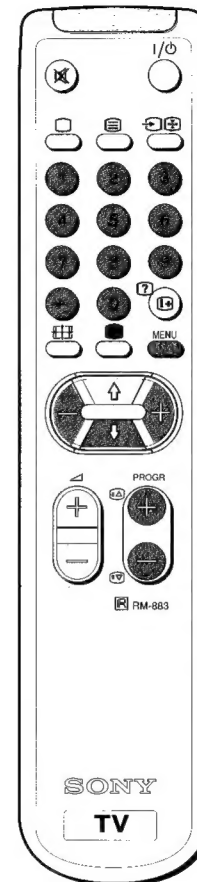


- 1 Press the MENU button on the remote control.
- 2 Press the blue button on the control to select Υ on the TV screen, then press the yellow button.
- 3 Press the blue button to select PROGR then press the yellow button.
- 4 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button until the channel you wish to rearrange appears on screen, then press the blue button once.
- 5 Press the red or yellow button to select the new programme number (e.g. PROGR 04) for your selected channel.
- 6 Press the blue button to select CH then press the yellow button to exchange the channels.
- 7 Repeat steps 4 to 6 if you wish to change the order of the other channels on your TV, then press MENU to return to normal TV screen.
- 8 Press the PROGR+/- button to view your selected channels on their new programme numbers.

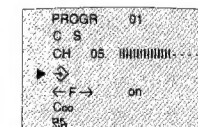
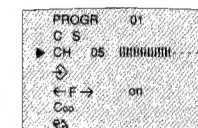
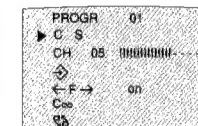
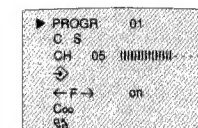
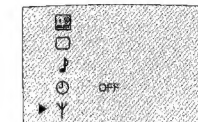
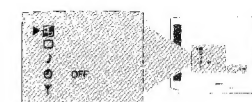


Manually Tuning the TV

You have already tuned the TV to receive all available channels using the 'Automatically Tuning the TV' procedure at the start of this manual. You can however carry out this operation manually using the following instructions.



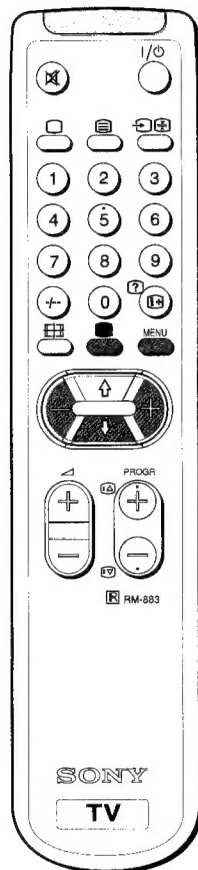
- 1 Press the MENU button on the remote control to display the menu on the TV screen.
- 2 Press the blue button to select the Υ symbol on the TV screen then press the yellow button.
- 3 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button on the remote control to allocate a programme number to the channel (eg PROGR 01). For double digit numbers e.g. 55, press the -/- button on the remote control then the corresponding numbered buttons.
- 4 Press the blue button to select the channel type (C to preset a regular channel or S to preset a cable channel) then press the yellow button to highlight the desired channel type.
- 5 Press the blue button to select the tuning bar scale then press the yellow or red button once to start the channel search. (Yellow to search up the scale or red to search down). When a channel is found it appears on the TV screen.
- 6 If you do not wish to store this channel on the programme number you selected, press the yellow or red button to continue searching for the desired channel.
- 7 If this is the channel you wish to store, press the blue button to select the CH symbol on the screen then press the yellow button to store.
- 8 Repeat steps 3 to 7 if you wish to store more channels then press the MENU button to remove the menu from the TV screen.



Additional TV Features

Fine-Tuning Channels

If a channel is slightly off tune, you can use this fine tune procedure to obtain a better picture reception.



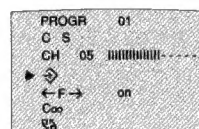
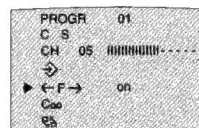
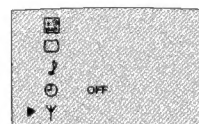
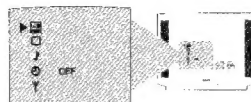
1 With the channel you wish to fine-tune on the screen, press the MENU button on the remote control. The menu display appears on the TV screen.

2 Press the blue button on the remote control to select the Ψ symbol on the TV screen then press the yellow button.

3 Press the blue button to select the $\leftarrow F \rightarrow$ symbol on the TV screen then press the red or yellow button to adjust the tuning.

4 Press the blue button to select the \diamond symbol on the TV screen then press the yellow button to store.

5 Press the MENU button to remove the menu from the TV screen.



Optional Connections

Using Optional Equipment

You can connect optional audio or video equipment to your TV, such as a VCR, a camcorder or video games as shown.

Select and View the Input Signal

1 Connect your equipment to the designated TV socket.

2 Press the \odot button repeatedly on your remote control until the correct input symbol appears on the TV screen.

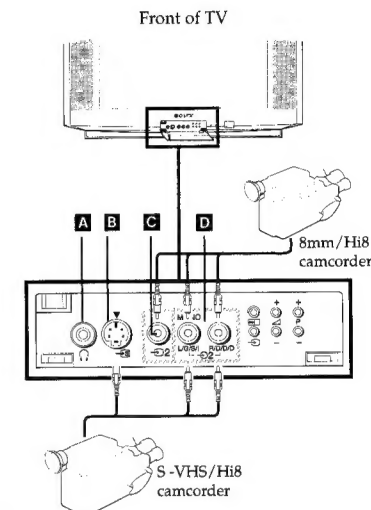
Symbol Input signals

- | | |
|-----------|--|
| $\odot 1$ | • Audio/video input signal through the Euro AV connector F |
| \odot | • RGB input signal through the Euro AV connector F |
| $\odot 2$ | • Audio/video input signal through the Euro AV connector E or the phono sockets C and D |
| $\odot 3$ | • S video input signal through the socket B . |

3 Switch on the connected equipment.

4 To return to normal TV picture, press the \square button on the remote control.

Note: To avoid picture distortion, do not connect equipment to the **B**, **C** or **E** connectors at the same time.



Additional Information

Connecting a VCR

We recommend you tune in the VCR signal to TV programme number '0' using the 'Manually Tuning in the TV' section of this instruction manual.

Connecting Headphones

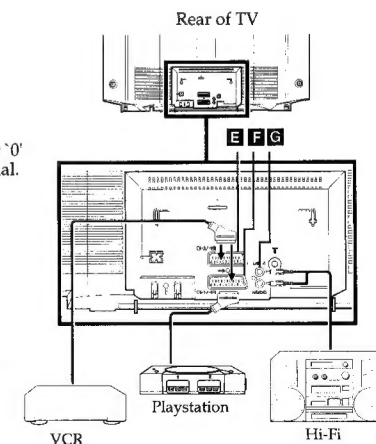
Plug in your headphones to the socket **A** on the front of the TV set.

Connecting Decoders

Plug in decoders to the socket **F** on the rear of the TV.












Connecting to External Audio Equipment

Plug in your Hi-Fi equipment to the **G** sockets on the rear of the TV if you wish to amplify the audio output from the TV.



Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

| Problem | Solution |
|--|--|
| No picture (screen is dark), no sound | <ul style="list-style-type: none"> • Plug the TV in. • Press the  button on the front of TV. • If the  indicator is on press  button or a programme number button on the remote control. • Check the aerial connection. • Check that the selected video source is on. • Turn the TV off for 3 or 4 seconds and then turn it on again using the  button on the front of the TV. |
| Poor or no picture (screen is dark), but good sound | <ul style="list-style-type: none"> • Using the MENU system, select the Picture Adjustment display. Adjust the brightness, picture and colour balance levels. • From the Picture Adjustment display select  to return to the factory settings. |
| Poor picture quality when watching a RGB video source. | <ul style="list-style-type: none"> • Press the  button repeatedly on the remote control until the RGB symbol  is displayed on the screen. |
| Good picture, no sound | <ul style="list-style-type: none"> • Press the  +/- button on the remote control. • If  is displayed on the screen, press the  button on the remote control. |
| No colour on colour programmes | <ul style="list-style-type: none"> • Using the MENU system, select the Picture Adjustment display. Adjust the colour balance. • From the Picture Adjustment display select  to return to the factory settings. |
| Distorted picture when changing programmes or selecting teletext | <ul style="list-style-type: none"> • Turn off any equipment connected to the 21 pin Euro connector on the rear of the TV. |
| Remote control does not function | <ul style="list-style-type: none"> • Replace the batteries. |

- If you continue to have these problems, have your TV serviced by qualified personnel.
- NEVER open the casing yourself.

Specifications

TV system

B/G/H

Colour system

PAL, SECAM

NTSC 3.58, 4.43 (only Video In)

Channel coverage

VHF: E2-E12

UHF: E21-E69

HYPER: S1-S46

Picture tube

KV-25C5D:

Super Trinitron

Approx. 63 cm (25 inches) (Approx. 59 cm picture measured diagonally),

110° deflection

KV-29C5D:

Super Trinitron

Approx. 72 cm (29 inches) (Approx. 68 cm picture measured diagonally),

110° deflection


Inputs

• Rear Terminals


 21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output

 21-pin Euro connector (CENELEC standard) including audio/video input, S-video input, Monitor audio/video output

• Front Terminals


 2 video input - phono jack

 2 audio inputs - phono jacks

 S video input - 4 pin DIN

Outputs

 Headphones jack - minijack stereo

 Audio outputs - phono jacks

Sound output:

2 x 10 W (RMS)

Power consumption

KV-25C5D: 97 W

KV-29C5D: 108 W

Standby Power consumption

1 W

Dimensions (wxhxd)

KV-25C5D: Approx. 717 x 507 x 494 mm

KV-29C5D: Approx. 794 x 567 x 545 mm

Weight

KV-25C5D: Approx. 33 kg

KV-29C5D: Approx. 43 kg

Accessories supplied

RM-883 Remote Control (1)

IEC designated batteries (2)

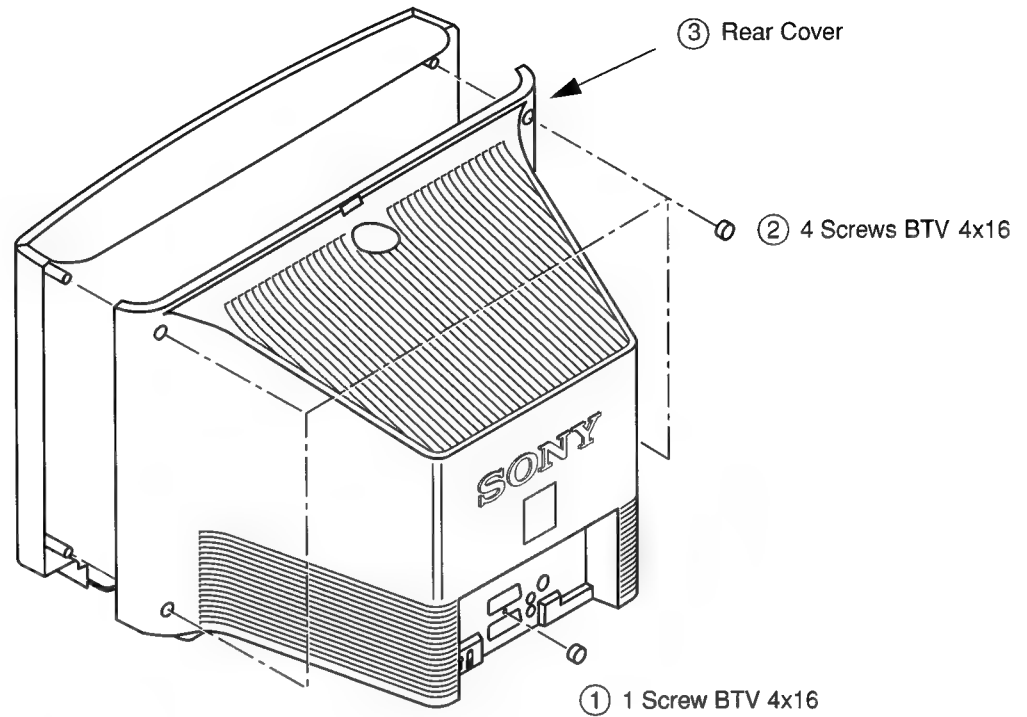
Other features

TELETEXT, Fastext, TOPtext

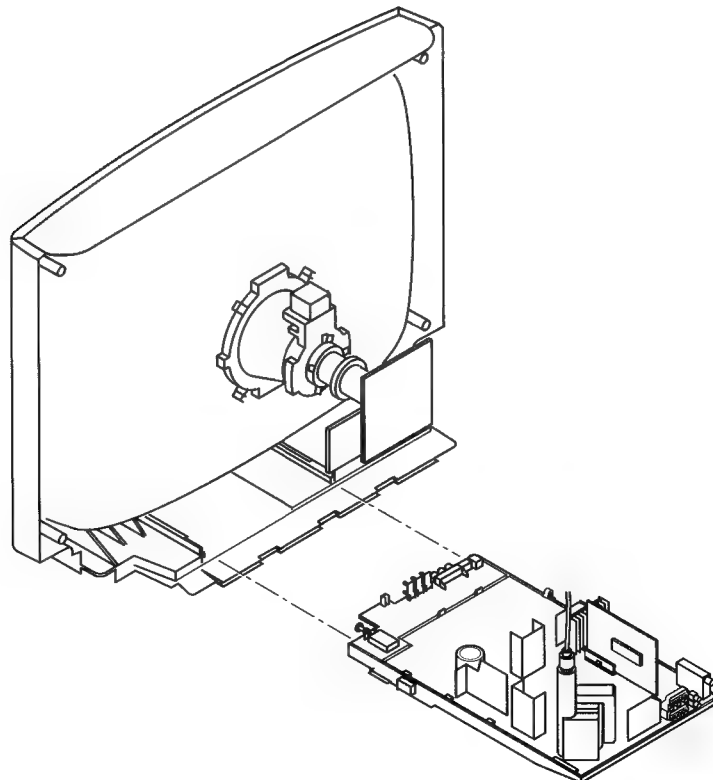
Design and specifications are subject to change without notice.

SECTION 2 DISASSEMBLY

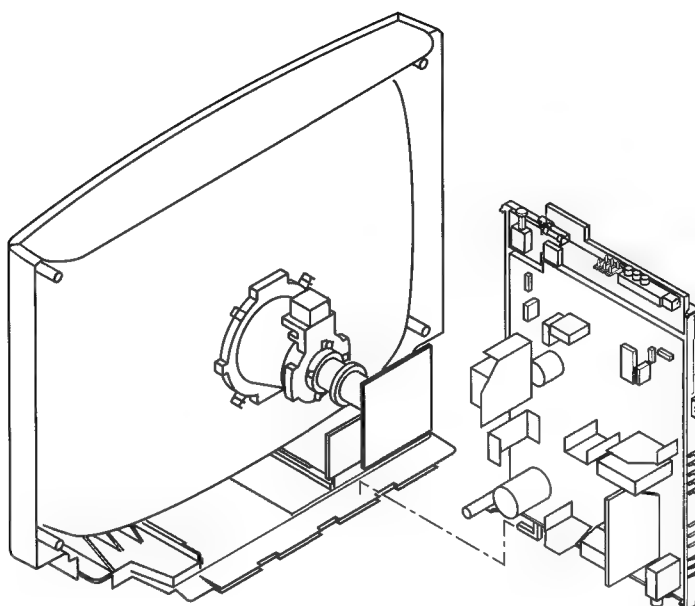
2-1. REAR COVER REMOVAL



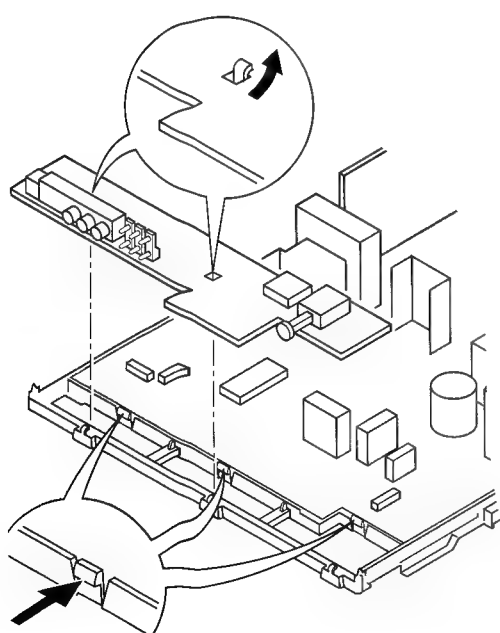
2-2. CHASSIS ASSY REMOVAL



2-3. SERVICE POSITION



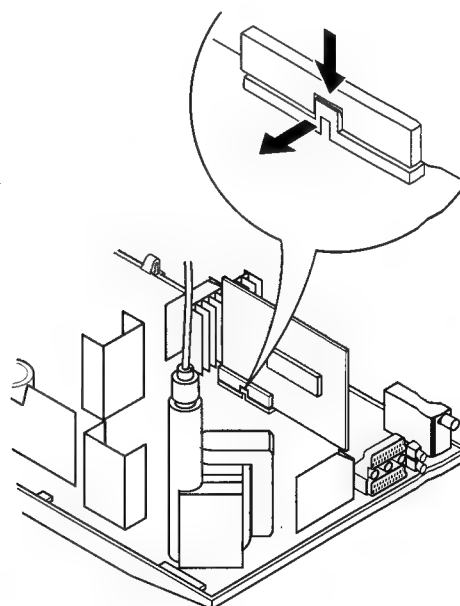
2-4. H1 BOARD REMOVAL



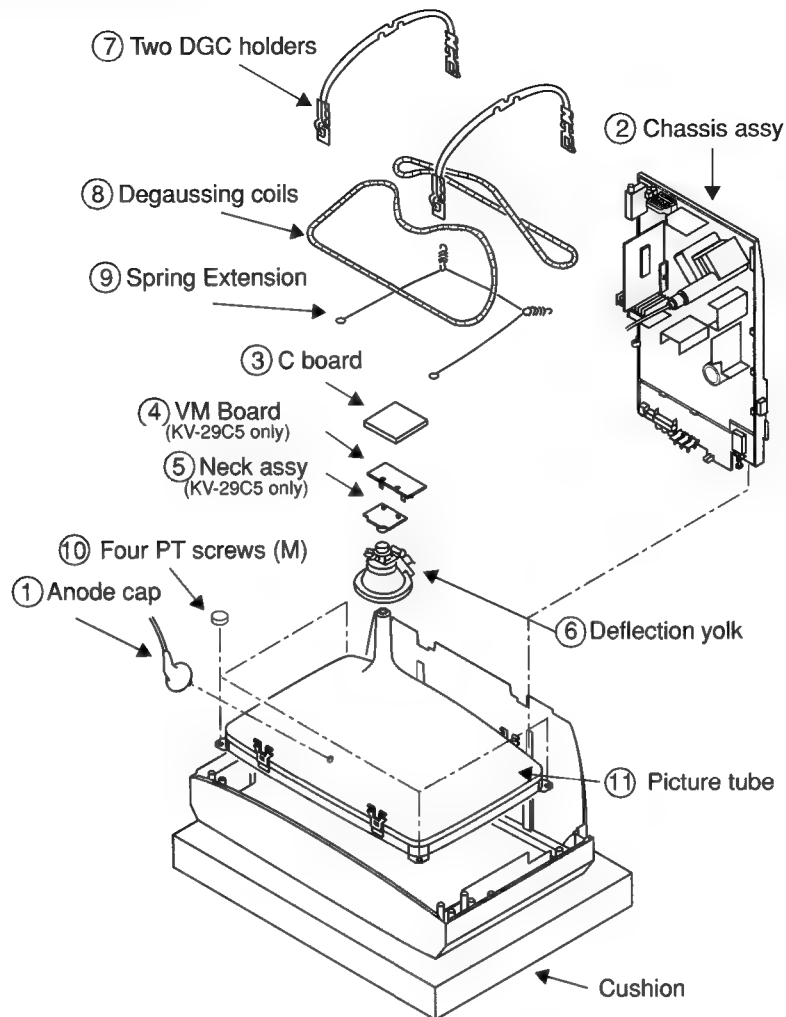
To release, push the claws in the direction of the arrow as indicated.

2-5. S1 BOARD REMOVAL

Release the clip indicated.



2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

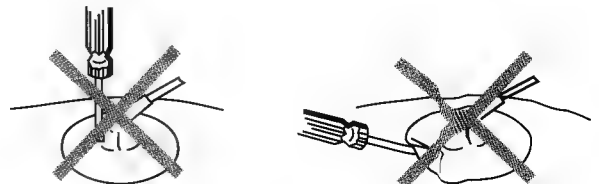
Note : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.

-
- ① Turn up one side of the rubber cap in the direction indicated by the arrow (a)
 - ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b)
 - ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow (c)

• HOW TO HANDLE THE ANODE-CAP

- ① To prevent damaging the surface of the anode-cap do not use sharp materials.
- ② Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
- ③ A metal fitting called a shatter hook terminal is fitted inside the rubber cap. Do not turn the rubber foot over excessively this may cause damage if the shatter hook sticks out.



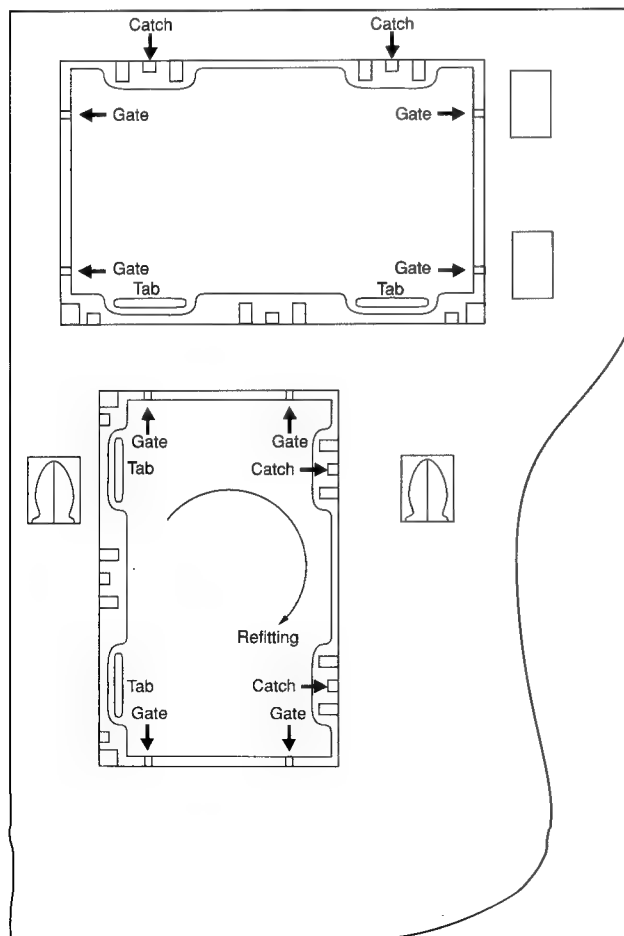
REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the A Board printed wiring board, the bottom plates fitted to the main chassis bracket require to be removed.

This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

Note : There are 2 plates fitted to the main bracket and secured by 4 gates.
Only remove the necessary plate to gain access to the printed wiring board.

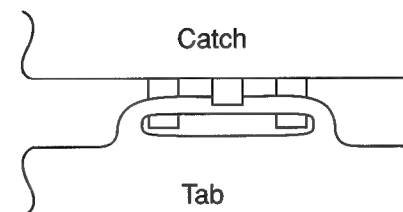


For safety reasons, on no account should the plates be removed and not refitted after servicing.

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

Please note that the plates need to be rotated 180 degrees from the cut position to allow the tabs to be fitted in the catch positions.



SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings :

Contrast 80% [or remote control normal]

Brightness 50%

Carry out the following adjustments in this order :

- 3-1. Beam Landing
- 3-2. Convergence
- 3-4. Focus
- 3-3. White balance

Note : Test equipment required

1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.
5. DC Power supply.

Preparation:

1. In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
2. Switch on the TV set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input an all-white signal from the pattern generator. Set the Contrast and Brightness to normal.
2. Set the pattern generator raster signal to all Red.
3. Move the deflection yolk forward and adjust with the purity control so that the Red is at the centre and the Blue and Green take up equally sized areas on each side of the screen. [See Fig.3-1 - 3-3].
4. Move the deflection yolk forward and adjust so that the entire screen becomes Red. [See Fig.3-1].
5. Switch the raster signal to Blue, then to Green and verify the purity condition.
6. When the position of the deflection yolk has been determined, fasten the deflection yolk with the screws.
7. If the beam does not land correctly in all the corners, use magnets to correct it. [See Fig.3-4].

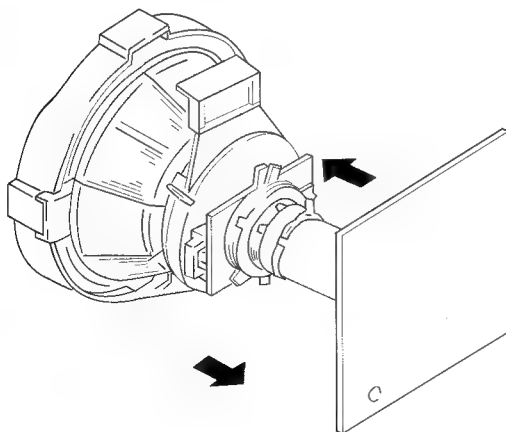


Fig. 3-1

Fig. 3-2

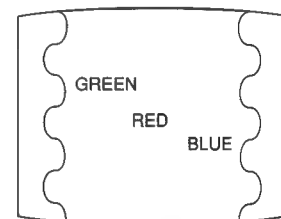
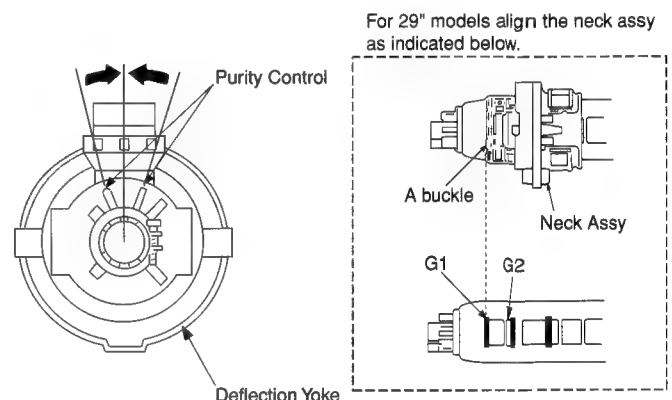


Fig. 3-3

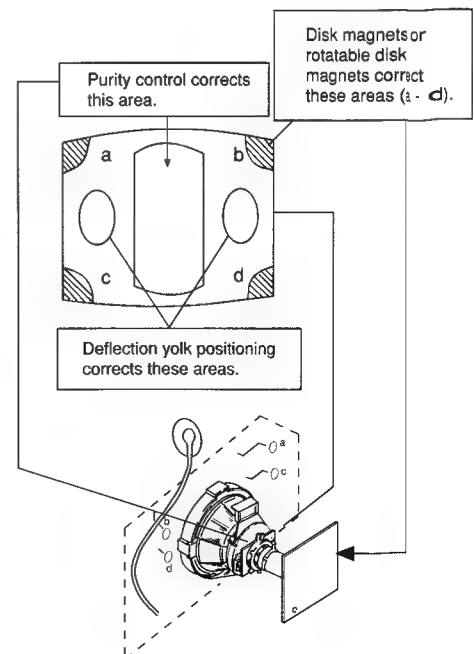


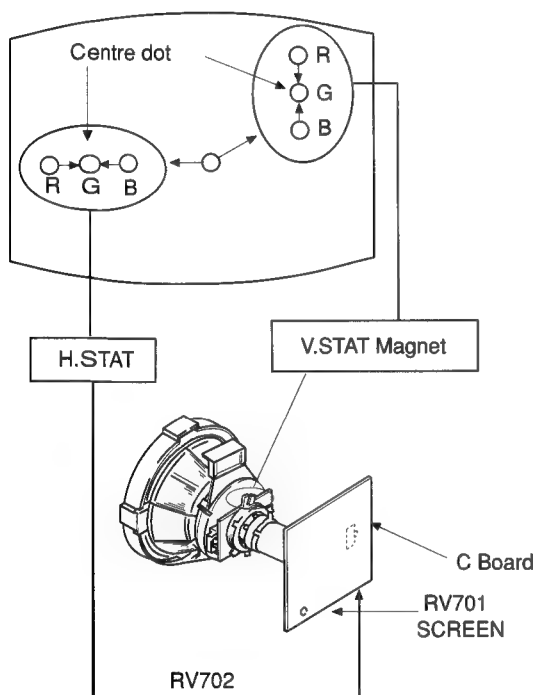
Fig. 3-4

3-2. CONVERGENCE

Preparation:

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the Brightness setting.
- Input a dot pattern from the pattern generator.

(1) Horizontal and vertical static convergence

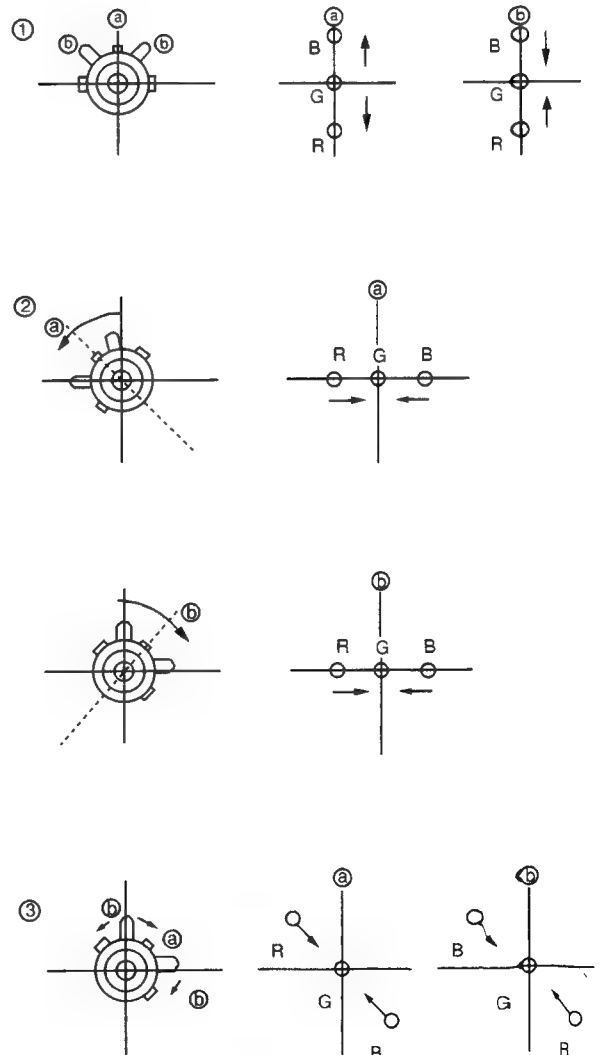


1. [Moving horizontally], adjust the H.STAT control so that the Red, Green and Blue points are on top of each other at the centre of the screen.
2. [Moving vertically], adjust the V.STAT magnet so that the Red, Green and Blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor is unable to bring the Red, Green and Blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner indicated below. [In this case, the H.STAT variable resistor and the V.STAT magnet influence each other].

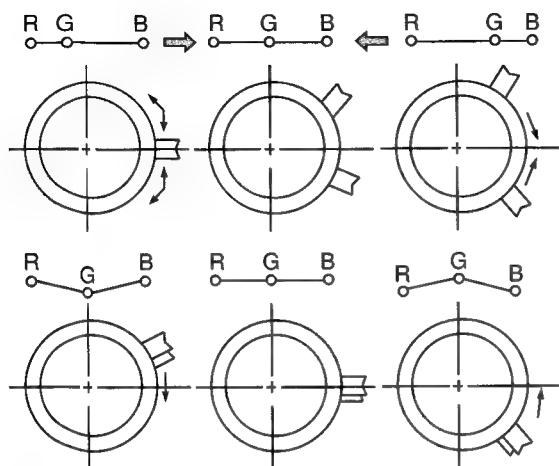
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



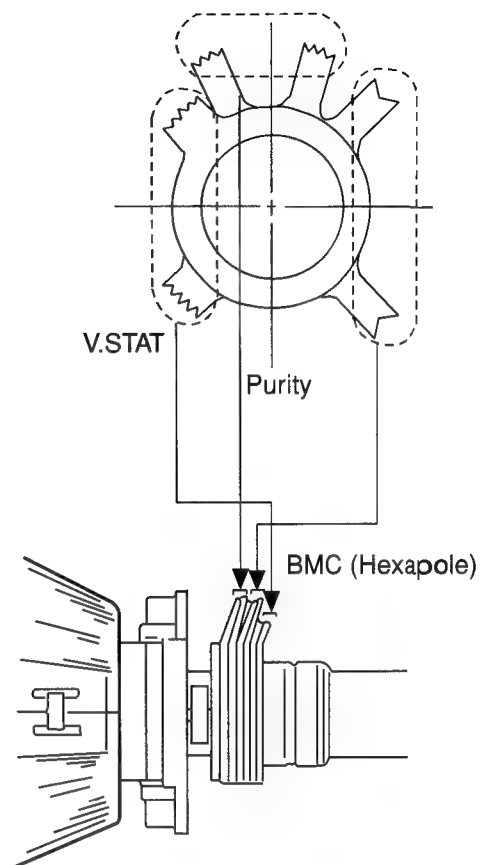
4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the Red, Green and Blue points move as indicated below.



(2) Operation of the BMC (Hexapole) magnet.



- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment whilst tracking.
Use the H. STAT VR to adjust the Red, Green and Blue dots so that they coincide at the centre of the screen [by moving the dots in the horizontal direction].

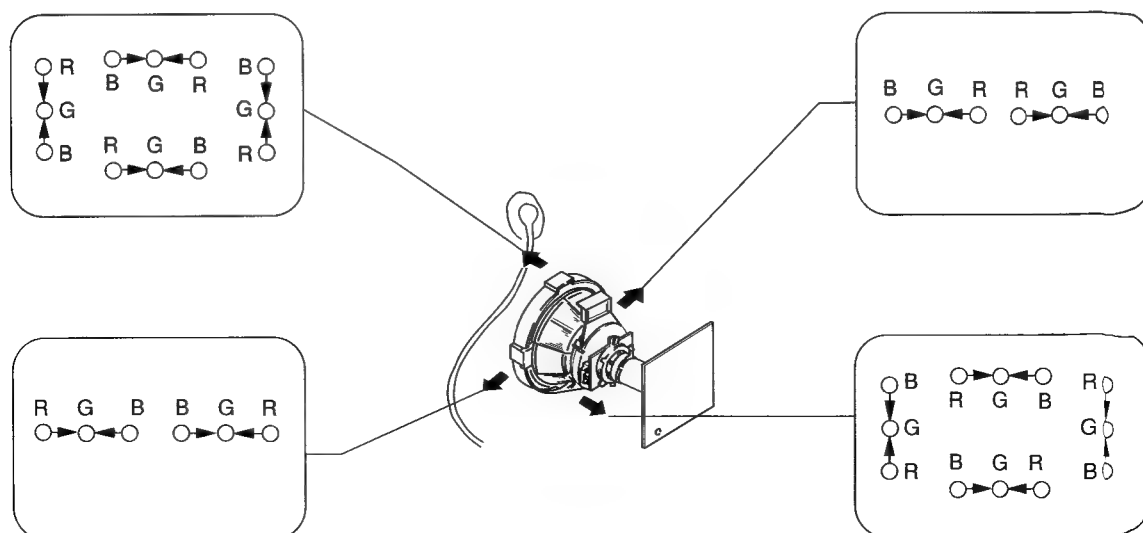


(3) Dynamic convergence adjustment.

Preparation:

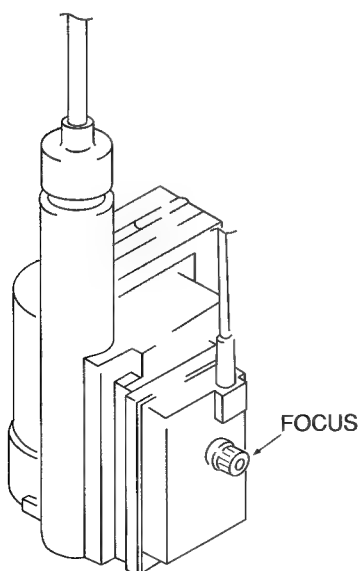
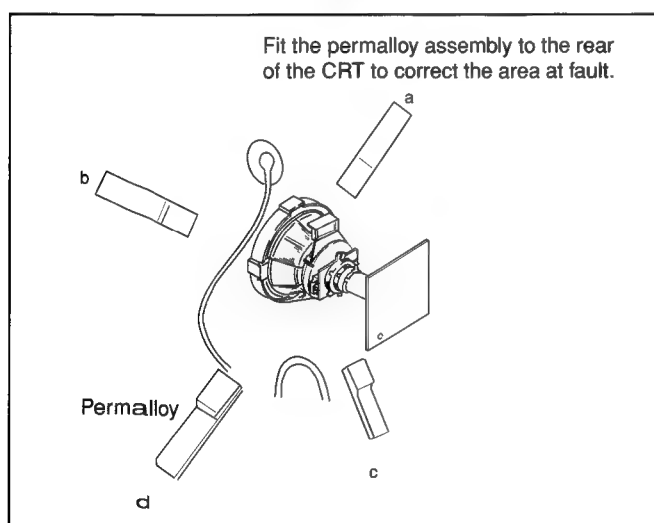
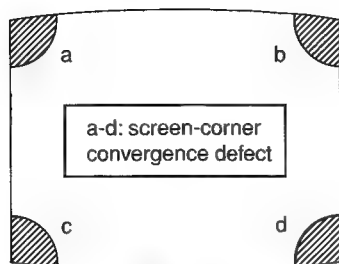
- Before starting this adjustment, adjust the horizontal and vertical static convergence.
- Slightly loosen the deflection yolk screws.

- Remove the deflection yolk spacer.
- Move the deflection yolk as indicated in the figure below and optimize the convergence.
- Tighten the deflection yolk screws.
- Re-install the deflection yolk spacer.



(4) **Screen corner convergence.**

- If you are unable to adjust the corner convergence properly, this can be corrected by the use of permalloy assemblies.

**3-3. Screen [G2], White balance****G2 Setting**

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 170Vdc from an external power supply to the R, G and B cathodes of the CRT.
4. Whilst watching the picture, adjust the G2 control [RV701 SCREEN] located on the C Board to the point just before the flyback return lines disappear.

White balance adjustment

1. Input a 'PAL' all-white signal from the pattern generator.
2. Enter into the Service Mode.
3. Enter into the 'Picture' service menu.
4. Select the 'Green drive' and adjust so that the White Balance becomes optimum.
5. Select the 'Blue drive' and adjust so that the White Balance becomes optimum.
6. Set the Picture to MIN.
7. Set the 'R-cut-off' to 07.
8. Adjust the 'G-cut-off', and the 'B-cut-off' so that the White Balance becomes optimum.
9. Press the ☐ button to return to TV operation.

PICTURE

| | |
|----------------|-----|
| R - Drive | Adj |
| G - Drive | Adj |
| B - Drive | Adj |
| R - cut - off | Adj |
| G - cut - off | Adj |
| B - cut - off | Adj |
| ID - start | 02 |
| ID - stop | 01 |
| ID - level | 01 |
| Bellfo | Adj |
| Sub Colour | Adj |
| Sub Brightness | Adj |

3-4. FOCUS

1. Input a Phillips colour pattern
2. Set the picture settings to normal.
3. Adjust the focus control located on the Flyback transformer to bring the centre of the screen into focus.

Note : Bring only the centre area of the screen into focus, switch to an all-white pattern and confirm that the magenta ring is hardly noticed. To obtain optimum focus balance the focus setting between optimum screen centre focus and a reduced magenta ring level.

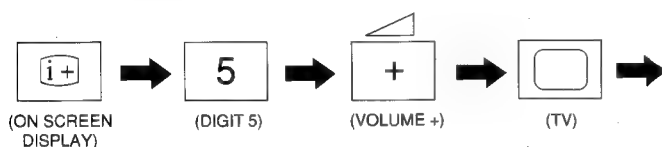
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustments to this model can be performed using the supplied Remote Commander RM-883.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch and enter into the stand-by mode.
2. Press the following sequence of buttons on the Remote Commander.



- 'TT--' will appear in the upper right corner of the screen.
Other status information will also be displayed.
3. Press 'MENU' on the remote commander to obtain the following menu on the screen.

| |
|------------|
| TEST MENU |
| > Picture |
| Geometry |
| Sound |
| TV Status |
| AGC Adjust |
| Technical |

4. Move to the corresponding adjustment item using the 'Green' [up] or 'Blue' [down] buttons on the Remote Commander.
5. Press the 'Yellow' button to enter into the required menu item.
6. Press the 'Menu' button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

Note : The data shown in the 'TV STATUS' table is dependant on destination and country.

PICTURE

| | |
|----------------|-----|
| R - Drive | Adj |
| G - Drive | Adj |
| B - Drive | Adj |
| R - cut - off | Adj |
| G - cut - off | Adj |
| B - cut - off | Adj |
| ID - start | 02 |
| ID - stop | 01 |
| ID - level | 01 |
| Bellfo | Adj |
| Sub Colour | Adj |
| Sub Brightness | Adj |

GEOMETRY

| | |
|--------------|-----|
| V centre | Adj |
| V size | Adj |
| V Lin | Adj |
| S Corr | Adj |
| H Cent | Adj |
| H Size | Adj |
| Pin Amp | Adj |
| Corner Pin | Adj |
| Pin Phase | Adj |
| V Bow | Adj |
| V Angle | Adj |
| Upper V Lin | Adj |
| Lower V Lin | Adj |
| Left HBLK | 07 |
| Right HBLK | 07 |
| CD Mode (AV) | 01 |

SOUND

| | |
|-------------------|------------------|
| Nicam Error Lower | 20 |
| Nicam Error Upper | 80 |
| Nicam Error Rate | xx [Status only] |
| AGC Gain Level | xx [Status only] |

TV STATUS

| | |
|---------------|-----------------|
| Destination | A/L/E/U/D/B/K/R |
| Text Language | East/West |

TECHNICAL

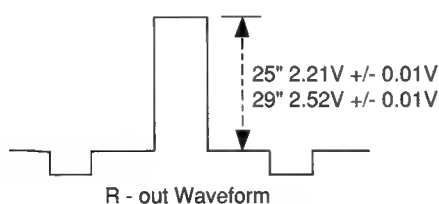
| | |
|----------------|----|
| GD - Secam | 30 |
| BD - Secam | 31 |
| RC - Secam | 11 |
| GC - Secam | 19 |
| BC - Secam | 10 |
| GD - Sports | 30 |
| BD - Sports | 36 |
| RC - Sports | 14 |
| GC - Sports | 15 |
| BC - Sports | 17 |
| Y - Delay (AV) | 07 |

SUB BRIGHTNESS ADJUSTMENT

1. Input a Phillips colour pattern.
2. Press 'TEST' 'TEST' 13 on the Remote Commander.
3. Adjust the 'Sub-Brightness' data so that there is barely a difference between the 0 IRE and 10 IRE signal levels.

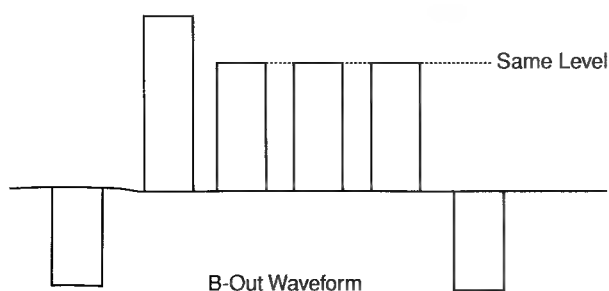
SUB CONTRAST ADJUSTMENT

1. Input a video signal that contains a small 100% white area on a black background
2. Set the picture control to maximum. ['TT01']
3. Connect an oscilloscope to Pin 1 of CN504 [A Board].
4. Enter into the 'Picture' service menu.
5. Adjust the 'R - Drive' data to obtain the following waveform.



SUB COLOUR ADJUSTMENT

1. Receive a PAL colour bar signal.
2. Connect an oscilloscope to Pin 3 of CN504 [A Board].
3. Enter into the 'Picture' service menu.
4. Adjust the 'Sub Colour' data so that the Cyan, Magenta and Blue colour bars are of equal levels as indicated below.



Note: Ensure that no signal is applied to the Antenna socket while carrying out the following IF adjustments.

SYSTEM B/G, D/K, I & L I.F ADJUSTMENT

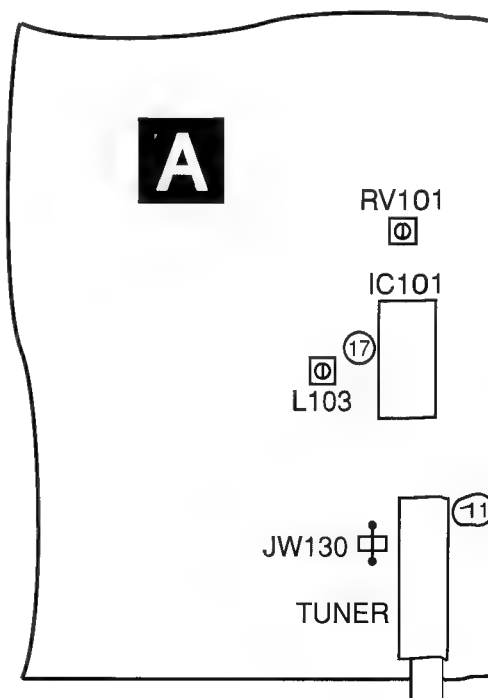
1. Input a 38.9Mhz carrier signal at 100dBuV to Pin 11 [IF output] of the tuner [TU101].
2. Measure the voltage at Pin 17 of [IC101].
3. Adjust L103 [A Board] to obtain a voltage of 2.5V +/- 0.3V.

SYSTEM L BAND 1 I.F ADJUSTMENT

1. Input a 34.0MHz carrier signal at 100dBuV to Pin 11 [IF output] of the tuner [TU101].
2. Select 'system L' + C00 [channel 00].
3. Measure the voltage at Pin 17 [IC101].
4. Adjust RV101 [A Board] to obtain a voltage of 2.5V +/- 0.3V.

TUNER AGC ADJUSTMENT

1. Receive a signal of 65dBuV / 75 ohm terminated, via the tuner antenna socket.
2. Connect a voltmeter to JW130 [A Board].
3. Enter into the 'Test Menu'.
4. Select the 'AGC Adjust' menu item.
5. Adjust the data using the Yellow and Green buttons on the Remote Commander to obtain a voltage of 3.0V +/- 0.2V.

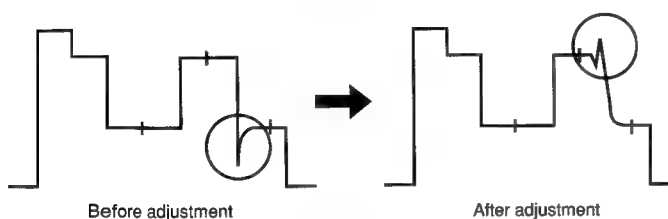


A Board component side

BELL FILTER ADJUSTMENT (Secam models only).

Note : Ensure that the TV set has been powered up for at least 1 minute to allow for drift before carrying out the following adjustment.

1. Input a video SECAM Colour Bar signal via AV1.
2. Connect an oscilloscope to pin 1 of CN504 [R-OUT] on the A board.
3. Enter into the 'Picture' menu and select 'Bell-f0'.
4. Decrease the register of 'Bell-f0' until the following waveform change between RED and BLUE is obtained.



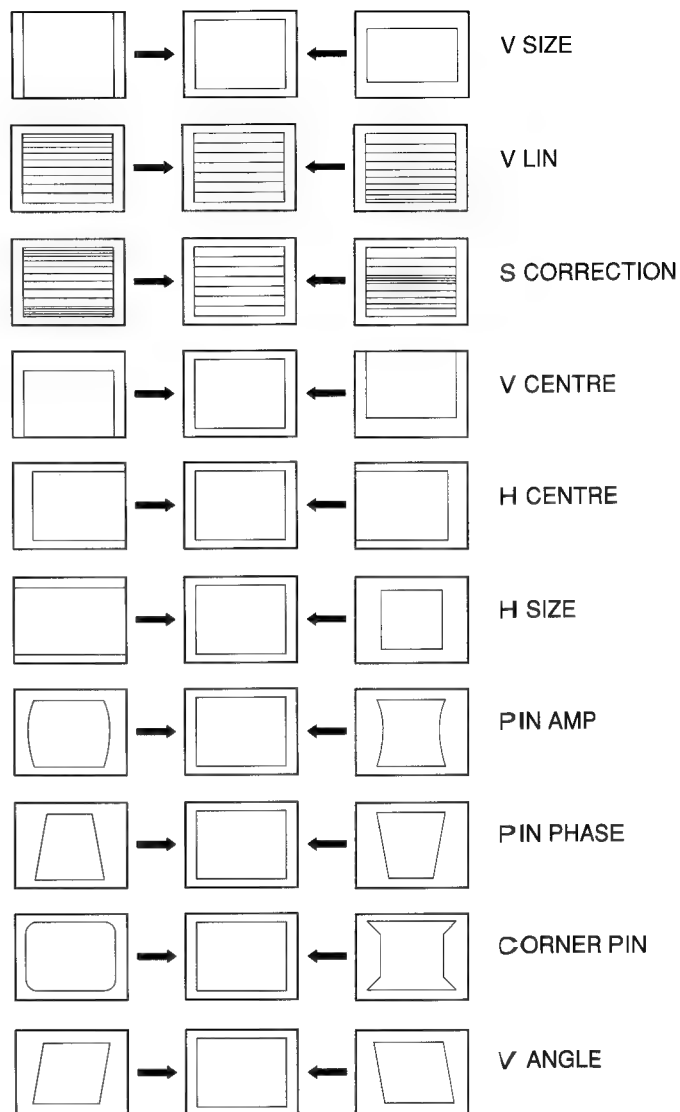
5. When the correct waveform has been obtained add an additional 7 steps to the register.

DEFLECTION SYSTEM ADJUSTMENT

1. Enter into the 'Geometry' service menu.
2. Select and adjust each item in order to obtain the optimum image.

GEOMETRY

| | |
|--------------|-----|
| V centre | Adj |
| V size | Adj |
| V Lin | Adj |
| S Corr | Adj |
| H Cent | Adj |
| H Size | Adj |
| Pin Amp | Adj |
| Corner Pin | Adj |
| Pin Phase | Adj |
| V Bow | Adj |
| V Angle | Adj |
| Upper V Lin | Adj |
| Lower V Lin | Adj |
| Left HBLK | 07 |
| Right HBLK | 07 |
| CD Mode (AV) | 01 |



4-2. TEST MODE 2:

Is available by pressing 'TEST' button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode, or press the ☐ TV button on the remote commander.

| | |
|----|---|
| 00 | Cancel Test mode |
| 01 | Picture maximum |
| 02 | Picture minimum |
| 03 | Volume 35% |
| 04 | Volume 50% |
| 05 | Volume 65% |
| 06 | Volume 80% |
| 07 | Ageing mode On/Off |
| 08 | Set shipping conditions |
| 09 | Display TV Status |
| 10 | No function |
| 11 | Sub Picture Adjustment |
| 12 | Sub Colour Adjustment |
| 13 | Sub Brightness Adjustment |
| 14 | Text H position Adjustment |
| 15 | Rotation test |
| 16 | Picture level 50% |
| 17 | Audio mute ON |
| 18 | Disable Blanking |
| 19 | No function |
| 20 | No function |
| 21 | Destination A |
| 22 | Destination L |
| 23 | Destination E |
| 24 | Destination U |
| 25 | Destination D |
| 26 | Destination B |
| 27 | Destination K |
| 28 | Destination R |
| 29 | No function |
| 30 | No function |
| 31 | Auto shutoff Disable/Enable |
| 32 | RGB priority Disable/Enable |
| 33 | Rotation On/OFF |
| 34 | Text language East/West |
| 35 | Wide CRT/4:3 CRT |
| 36 | VM ON/OFF test |
| 37 | No function |
| 38 | No function |
| 39 | No function |
| 40 | No function |
| 41 | Re-initialize the NVM [Only when Prog=59] |

| | |
|---------|---|
| 42 | Re-initialise geometry settings [Only when Prog=59] |
| 43 | No function |
| 44 | No function |
| 45 | No function |
| 46 | No function |
| 47 | No function |
| 48 | Set NVM as NON Virgin [Only when Prog=59] |
| 49 | Set NVM as Virgin [Only when Prog=59] |
| 50 | No function |
| 51 | No function |
| 52 | No function |
| 53 | No function |
| 54 | No function |
| 55 | No function |
| 56 | No function |
| 57 | No function |
| 58 | No function |
| 59 | No function |
| 60 | No function |
| 61 | Auto AGC Adjust |
| 62 | Alternative Dest B Autotuning |
| 63 | Enable/Disable Y/C input |
| 64 | Signal Quality Check for Auto Tune |
| 65 | Signal Quality NOT Checked for Auto Tune |
| 66 | No function |
| 67 | Manual AGC Adjust |
| 68 -100 | No function |

4-3. FE-1 SELF DIAGNOSTIC SOFTWARE

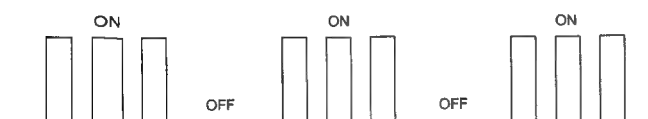
The identification of errors within the FE-1 chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted) See Table 1., non fatal errors are reported using this method. Each time the software detects an error it is stored within the NVM. See Table 2.

Table 1

| ERROR | LED ERROR COUNT |
|--|-----------------|
| No error | 00 |
| Not allowed (may be confused with Sircs response flash!) | 01 |
| Protection circuit trip < ANY TIME > | 02 |
| Reserved | 03 |
| No vertical sync | 04 |
| AKB | 05 |
| IIC bus clock and/or data lines low at Power ON | 06 |
| NVM no IIC bus acknowledge at Power ON | 07 |
| Jungle controller no IIC acknowledge at Power ON | 08 |
| Tuner no acknowledge at Power ON | 09 |
| Sound processor no acknowledge at Power ON | 10 |

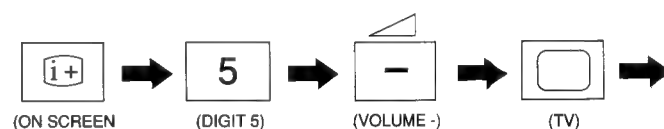
Flash Timing Example : e.g. error number 3

StBy LED



How to enter into Table 2

1. Turn on the main power switch of the TV set and enter into the 'Standby Mode'.
2. Press the following sequence of buttons on the Remote Commander.



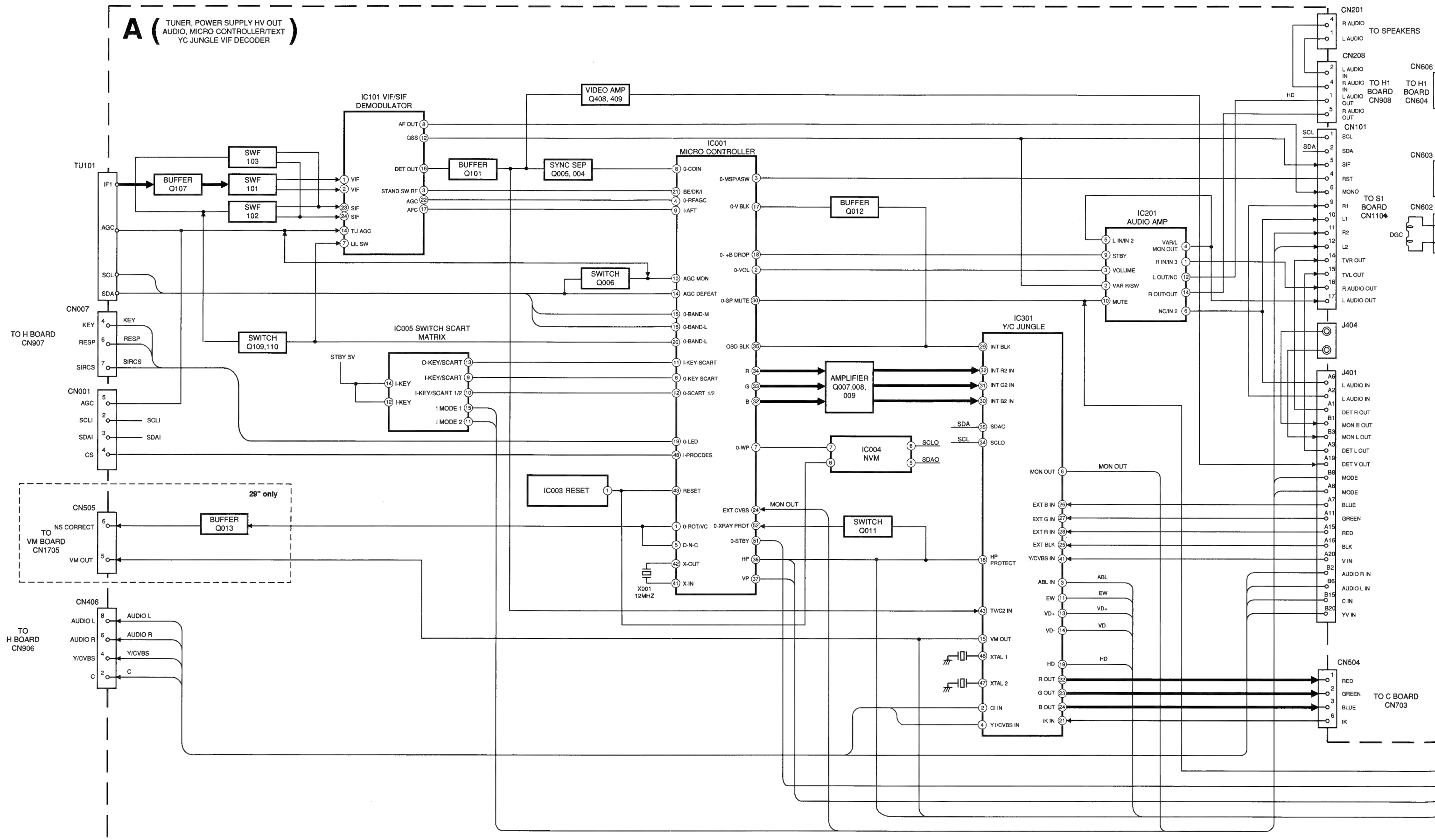
3. The following table will be displayed indicating the error count.

Table 2

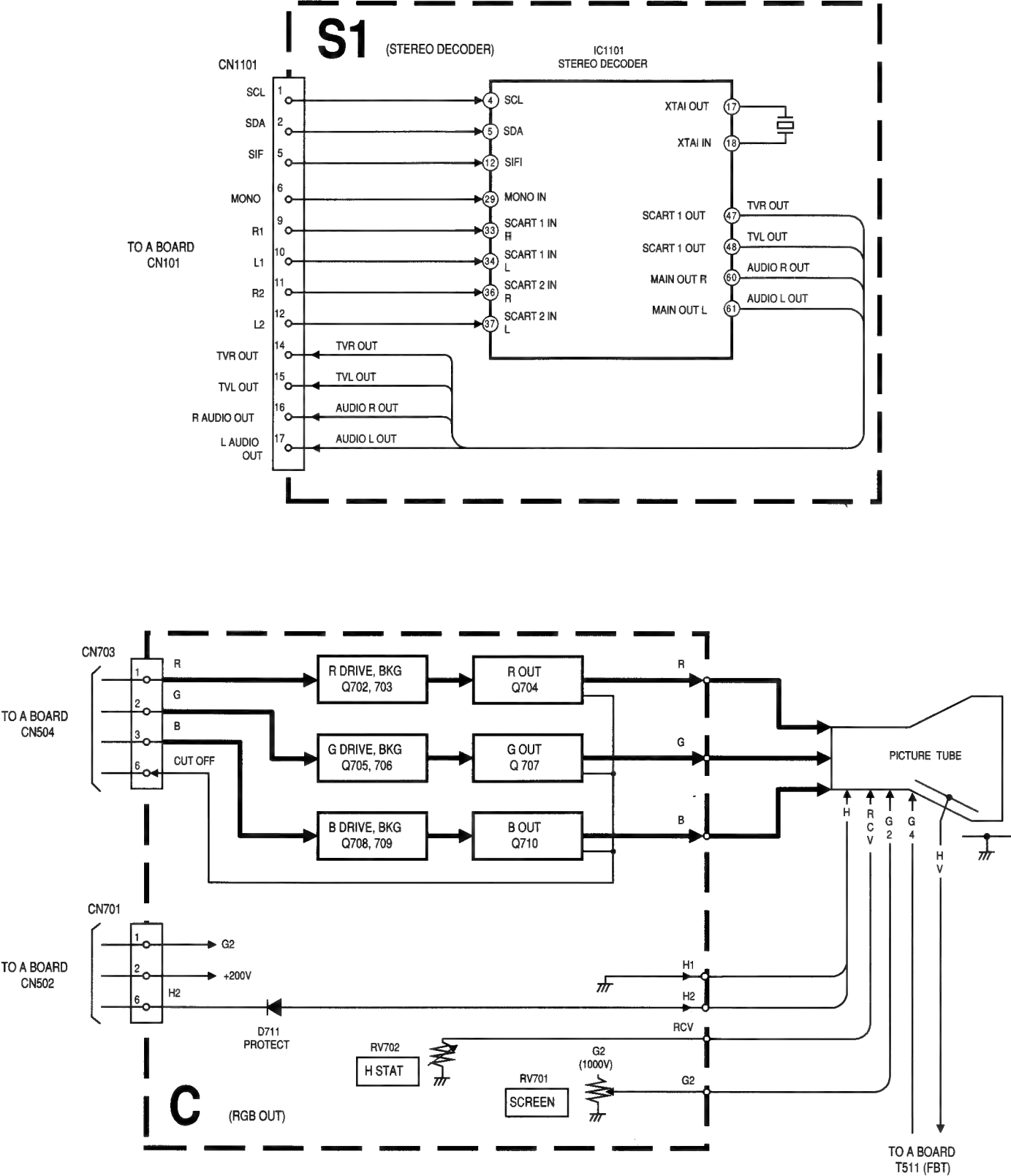
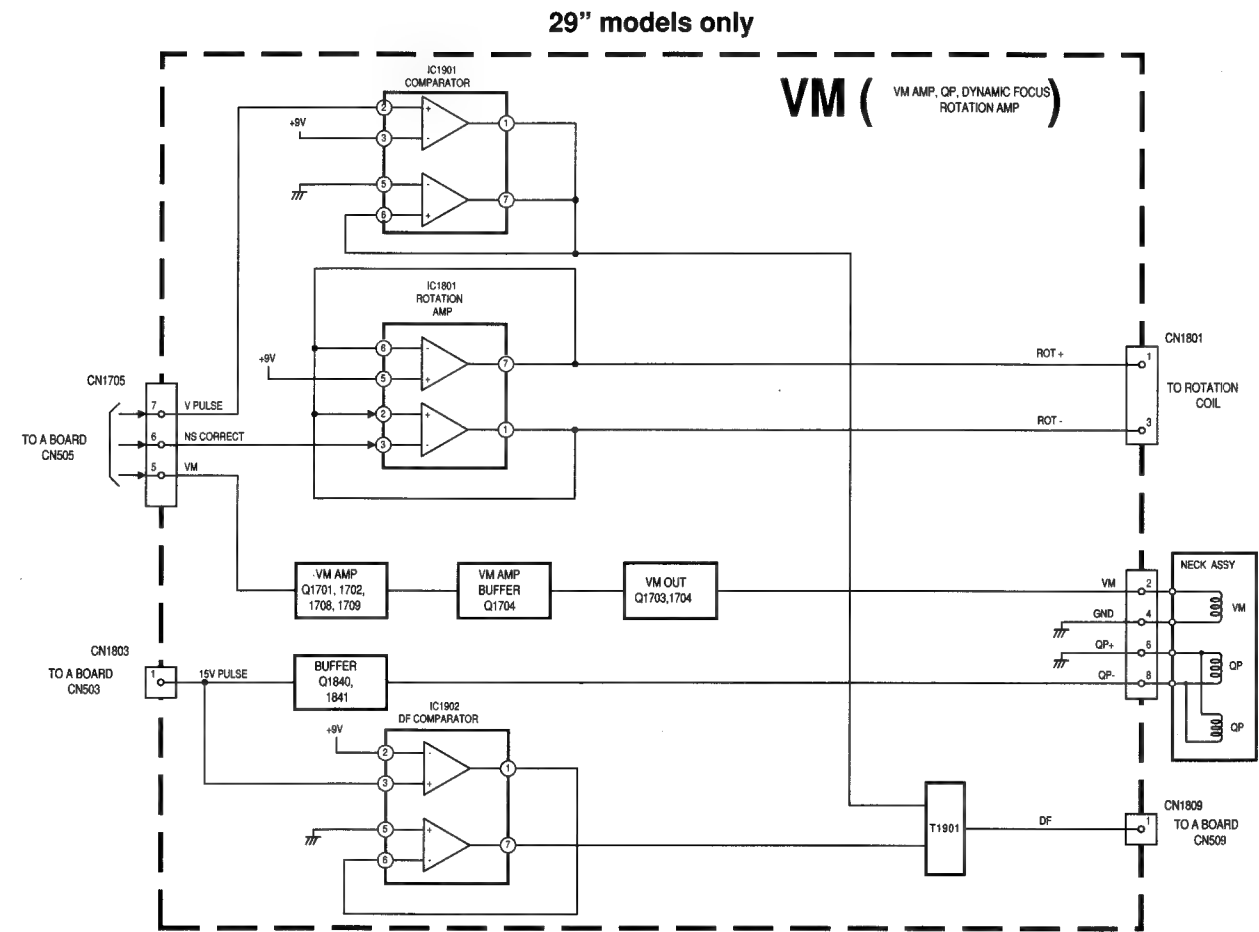
| Error | Times |
|-------|-------|
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |

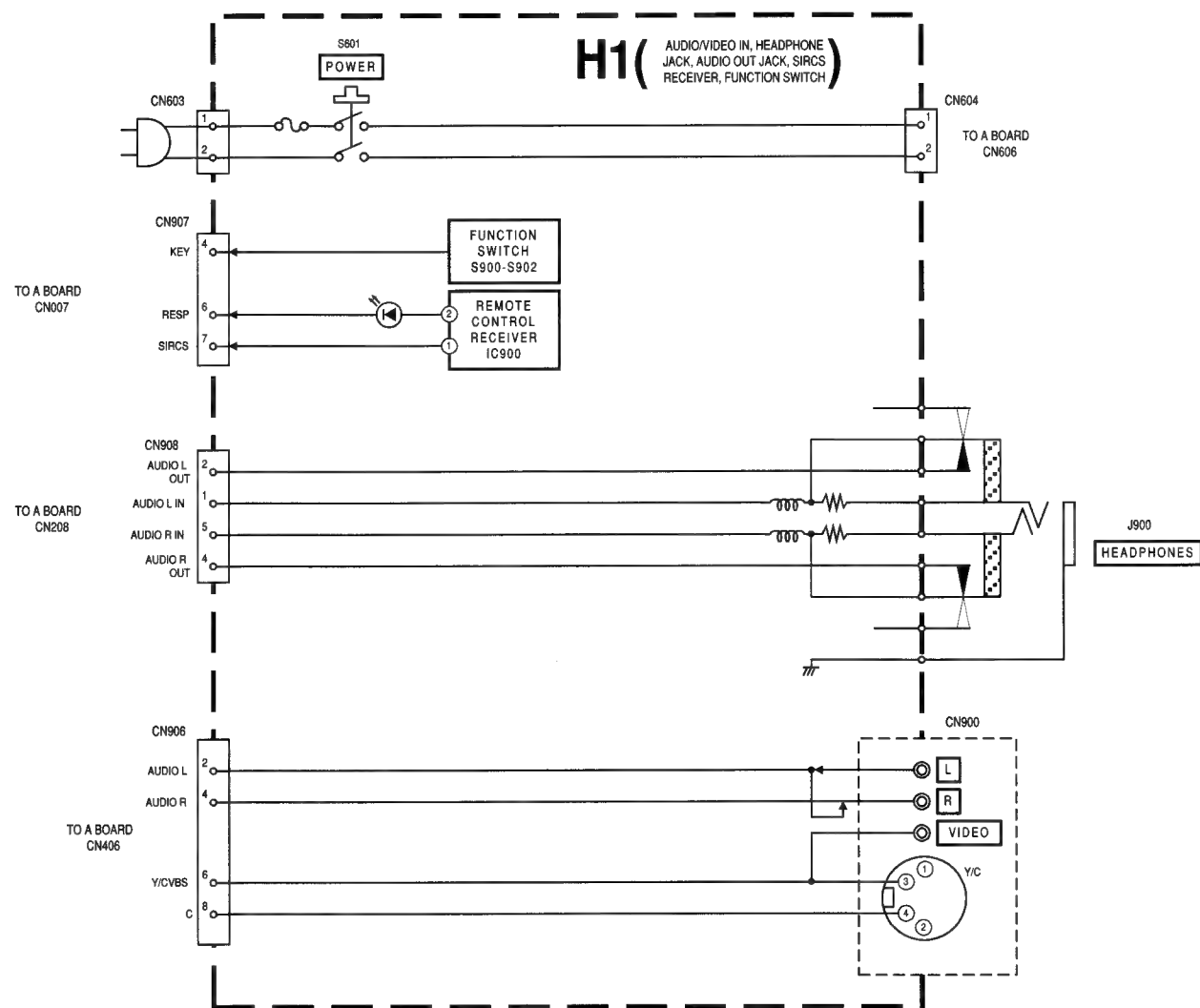
Note: To clear the error count data press '80' on the Remote commander.

5-1 BLOCK DIAGRAMS (1)

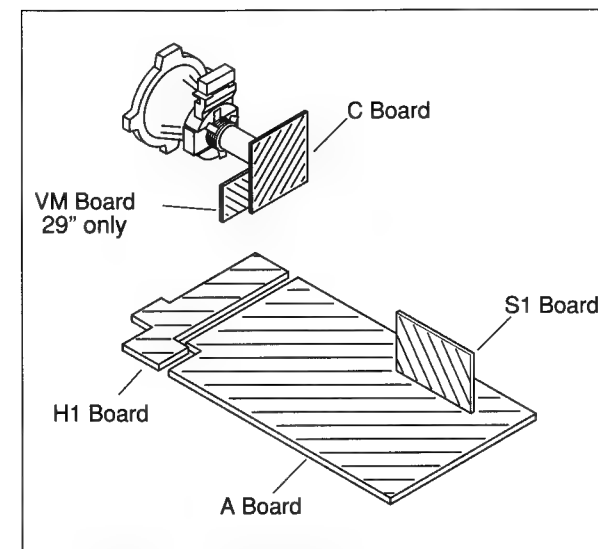


5-1 BLOCK DIAGRAMS (2)





5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted.
- pF : μF 50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W

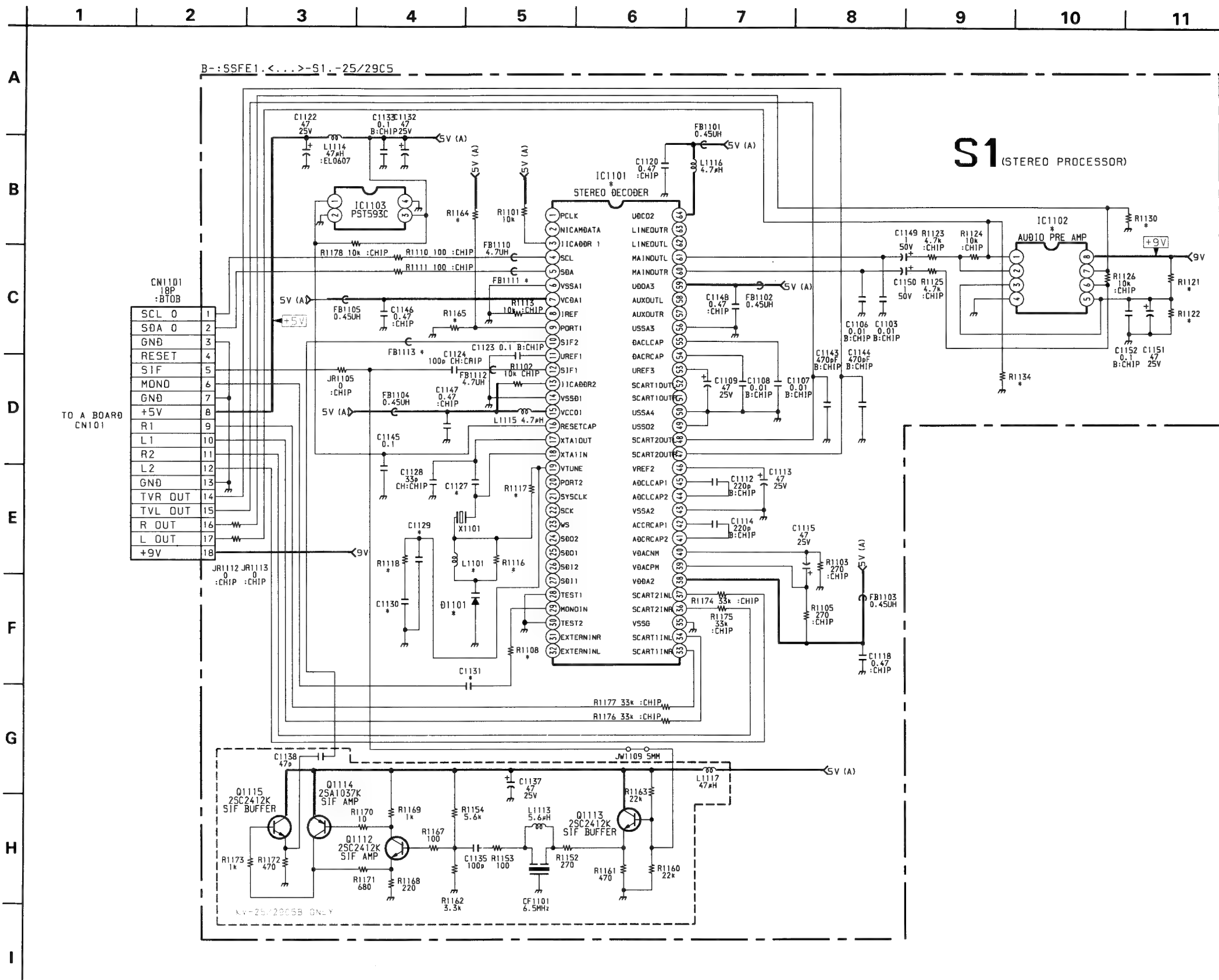
- Chip resistors are 1/10W
- All resistors are in ohms.
k = 1000 ohms, M = 1000,000 ohms
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital mutimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerences.
- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

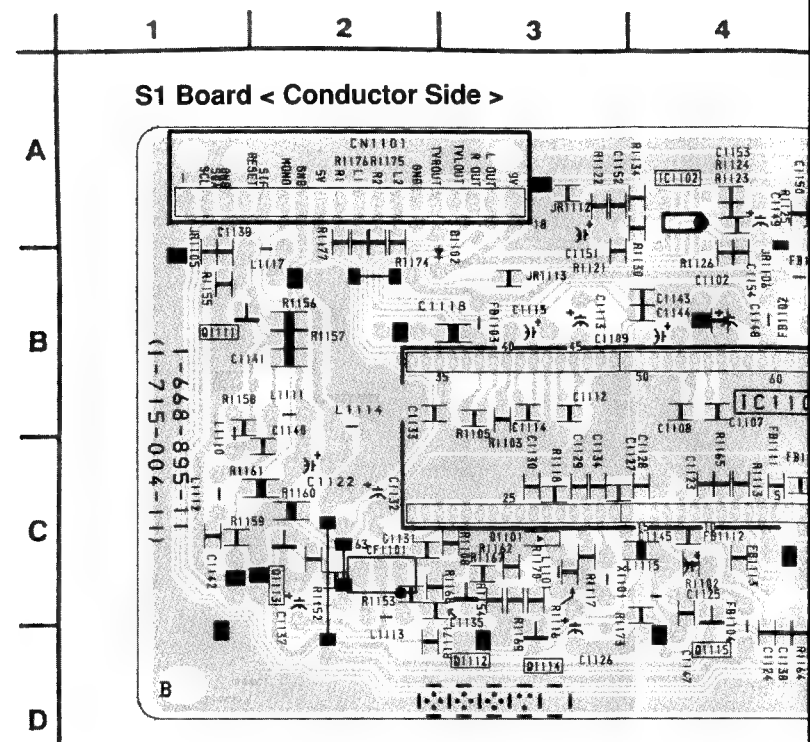
| | | |
|-----------|-------|-----------------------------|
| RESISTOR | RN | : METAL FILM |
| | RC | : SOLID |
| | FPRD | : NON FLAMMABLE CARBON |
| | FUSE | : NON FLAMMABLE FUSIBLE |
| | RS | : NON FLAMMABLE METAL OXIDE |
| | RB | : NON FLAMMABLE CEMENT |
| | RW | : NON FLAMMABLE WIREWOUND |
| | ⊗ | : ADJUSTMENT RESISTOR |
| COIL | LF-8L | : MICRO INDUCTOR |
| CAPACITOR | TA | : TANTALUM |
| | PS | : STYROL |
| | PP | : POLYPROPYLENE |
| | PT | : MYLAR |
| | MPS | : METALIZED POLYESTER |
| | MPP | : METALIZED POLYPROPYLENE |
| | ALB | : BIPOLAR |
| | ALT | : HIGH TEMPERATURE |
| | ALR | : HIGH RIPPLE |

Note: The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

Note: Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la securite. Ne les remplacer que par des pieces de numero specifie.



S1 [STEREO PROCESSOR]



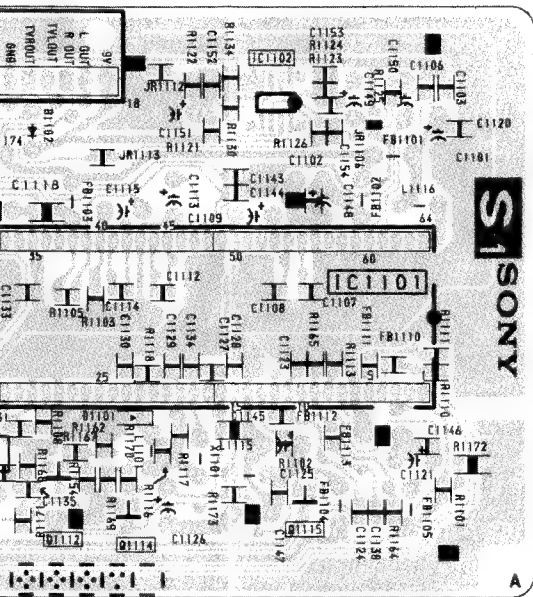
S1 BOARD IC VOLTAGE TABLE

| IC Voltage Table | | |
|------------------|---------|-------------|
| Ref No | Pin No | Voltage (V) |
| IC1101 | 4 | 3.4 |
| | 5 | 3.2 |
| | 7 | 4.8 |
| | 8 | 2.3 |
| | 9 | 4.8 |
| | 10 - 12 | 2.3 |
| | 13 | 4.8 |
| | 15 | 4.8 |
| | 16 | 4.8 |
| | 17 | 2.6 |
| | 18 | 3.5 |
| | 19 | 4.0 |
| | 33 - 34 | 2.4 |
| | 36 - 37 | 2.4 |
| | 38 - 39 | 4.8 |
| | 41 - 42 | 2.4 |
| | 44 - 48 | 2.4 |
| | 53 - 55 | 2.4 |
| | 59 | 4.8 |
| | 60 - 61 | 2.4 |
| | 64 | 4.8 |
| IC1102 | 1 | 4.5 |
| | 2 | 4.1 |
| | 3 | 4.5 |
| | 6 | 4.3 |
| | 7 | 3.5 |
| | 8 | 9.0 |

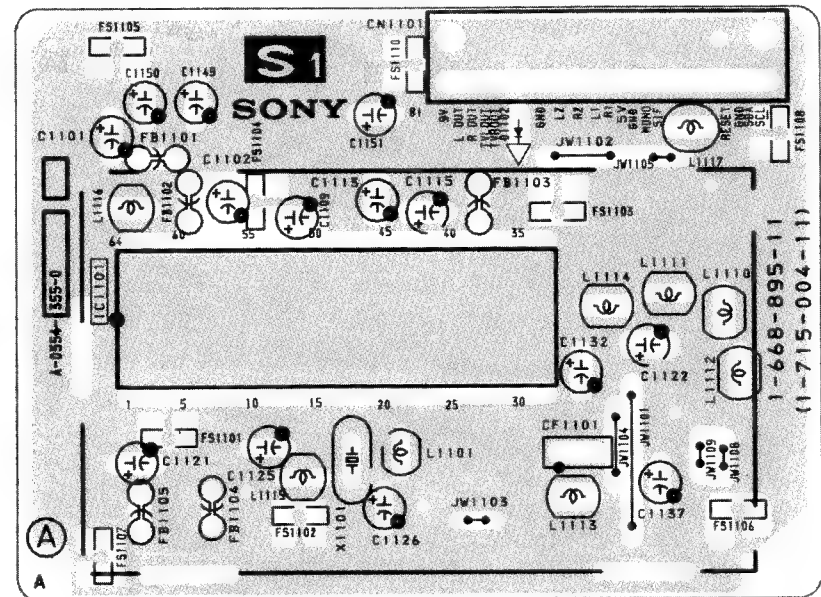
OR]



r Side >



S1 Board < Component Side >



VOLTAGE TABLE

| IC Voltage Table | |
|------------------|-------------|
| Pin No | Voltage (V) |
| 4 | 3.4 |
| 5 | 3.2 |
| 7 | 4.8 |
| 8 | 2.3 |
| 9 | 4.8 |
| 10 - 12 | 2.3 |
| 13 | 4.8 |
| 15 | 4.8 |
| 16 | 4.8 |
| 17 | 2.6 |
| 18 | 3.5 |
| 19 | 4.0 |
| 33 - 34 | 2.4 |
| 36 - 37 | 2.4 |
| 38 - 39 | 4.8 |
| 41 - 42 | 2.4 |
| 44 - 48 | 2.4 |
| 53 - 55 | 2.4 |
| 59 | 4.8 |
| 60 - 61 | 2.4 |
| 64 | 4.8 |
| 1 | 4.5 |
| 2 | 4.1 |
| 3 | 4.5 |
| 6 | 4.3 |
| 7 | 3.5 |
| 8 | 9.0 |

S1 BOARD TRANSISTOR VOLTAGE TABLE

| Transistor Voltage Table | | | |
|--------------------------|----------|---------------|-------------|
| Ref No | (B) Base | (C) Collector | (E) Emitter |
| Q1111 | 2.0 | 4.1 | 1.3 |
| Q1112 | 1.5 | 3.5 | 0.9 |
| Q1113 | 1.9 | 4.1 | 1.3 |
| Q1114 | 3.5 | 3.3 | 4.1 |
| Q1115 | 3.3 | 4.1 | 2.7 |

S1 BOARD * MARK

| Ref | 25C5A | 25C5B | 25C5D | 25C5E | 25C5K | 25C5R | 29C5A | 29C5B | 29C5D | 29C5E | 29C5K | 29C5R |
|--------|---------|-----------|---------|-----------|-----------|---------|---------|-----------|---------|-----------|-----------|---------|
| C1127 | 22PF | 33PF | 22PF | 33PF | 33PF | 22PF | 22PF | 33PF | 22PF | 33PF | 33PF | 22PF |
| C1129 | - | 0.033MF | - | 0.033MF | 0.033MF | - | - | 0.033MF | - | 0.033MF | 0.033MF | - |
| C1130 | - | 0.033MF | - | 0.033MF | 0.033MF | - | - | 0.033MF | - | 0.033MF | 0.033MF | - |
| C1131 | 0.47MF | 0.47MF | 0.47MF | - | - | 0.47MF | 0.47MF | 0.47MF | 0.47MF | - | - | 0.47MF |
| D1101 | 0 | BB135 | 0 | BB135 | BB135 | 0 | 0 | BB135 | 0 | BB135 | BB135 | 0 |
| FB1111 | 6.8UH | 4.7UH | 6.8UH | 4.7UH | 4.7UH | 6.8UH | 6.8UH | 4.7UH | 6.8UH | 4.7UH | 4.7UH | 6.8UH |
| FB1113 | - | 4.7UH | - | - | - | - | - | 4.7UH | - | - | - | - |
| IC1101 | TDA9870 | TDA9875P | TDA9870 | TDA9875P | TDA9875P | TDA9870 | TDA9870 | TDA9875P | TDA9870 | TDA9875P | TDA9875P | TDA9870 |
| IC1102 | LM358D | UPC4558G2 | LM358D | UPC4558G2 | UPC4558G2 | LM358D | LM358D | UPC4558G2 | LM358D | UPC4558G2 | UPC4558G2 | LM358D |
| L1101 | - | 2.7UH | - | 2.7UH | 2.7UH | - | - | 2.7UH | - | 2.7UH | 2.7UH | - |
| L1113 | - | 5.6UH | - | - | - | - | - | 5.6UH | - | - | - | - |
| L1117 | - | 10UH | - | - | - | - | - | 10UH | - | - | - | - |
| R1108 | 2.2K | 2.2K | 2.2K | - | - | 2.2K | 2.2K | 2.2K | 2.2K | - | - | 2.2K |
| R1116 | 0 | 39K | 0 | 39K | 39K | 0 | 0 | 39K | 0 | 39K | 39K | 0 |
| R1117 | - | 10K | - | 10K | 10K | - | - | 10K | - | 10K | 10K | - |
| R1118 | - | 20K | - | 20K | 20K | - | - | 20K | - | 20K | 20K | - |
| R1121 | 4.7K | 10K | 4.7K | 10K | 10K | 4.7K | 4.7K | 10K | 4.7K | 10K | 10K | 4.7K |
| R1122 | 4.7K | 10K | 4.7K | 10K | 10K | 4.7K | 4.7K | 10K | 4.7K | 10K | 10K | 4.7K |
| R1130 | 10K | - | 10K | - | - | 10K | 10K | - | 10K | - | - | 10K |
| R1134 | 10K | - | 10K | - | - | 10K | 10K | - | 10K | - | - | 10K |
| R1164 | - | 10K | - | 10K | 10K | - | - | 10K | - | 10K | 10K | - |
| R1165 | 0 | - | 0 | - | - | 0 | 0 | - | 0 | - | - | 0 |

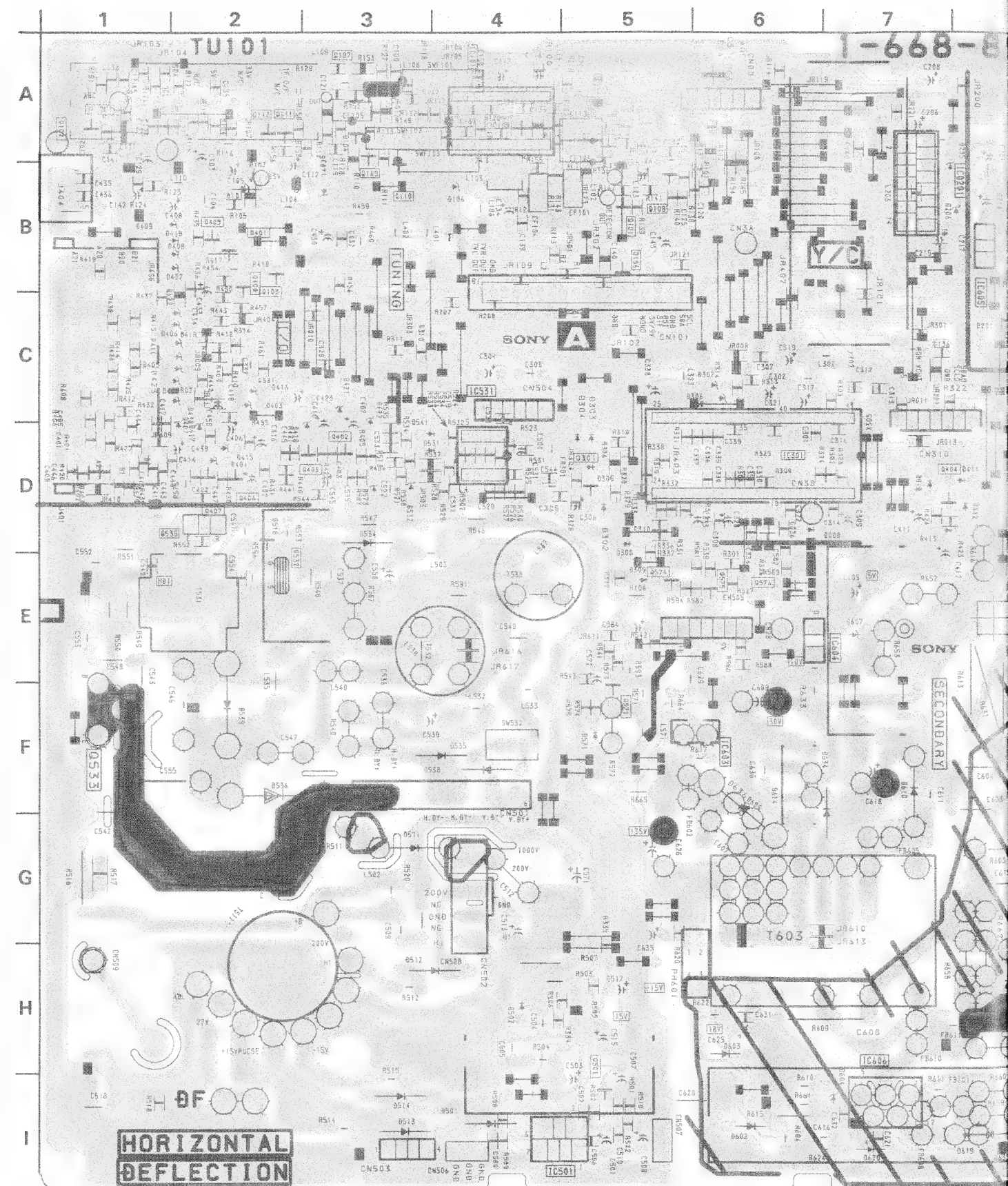
A BOARD

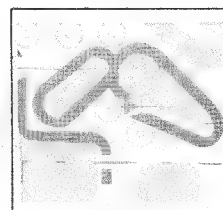
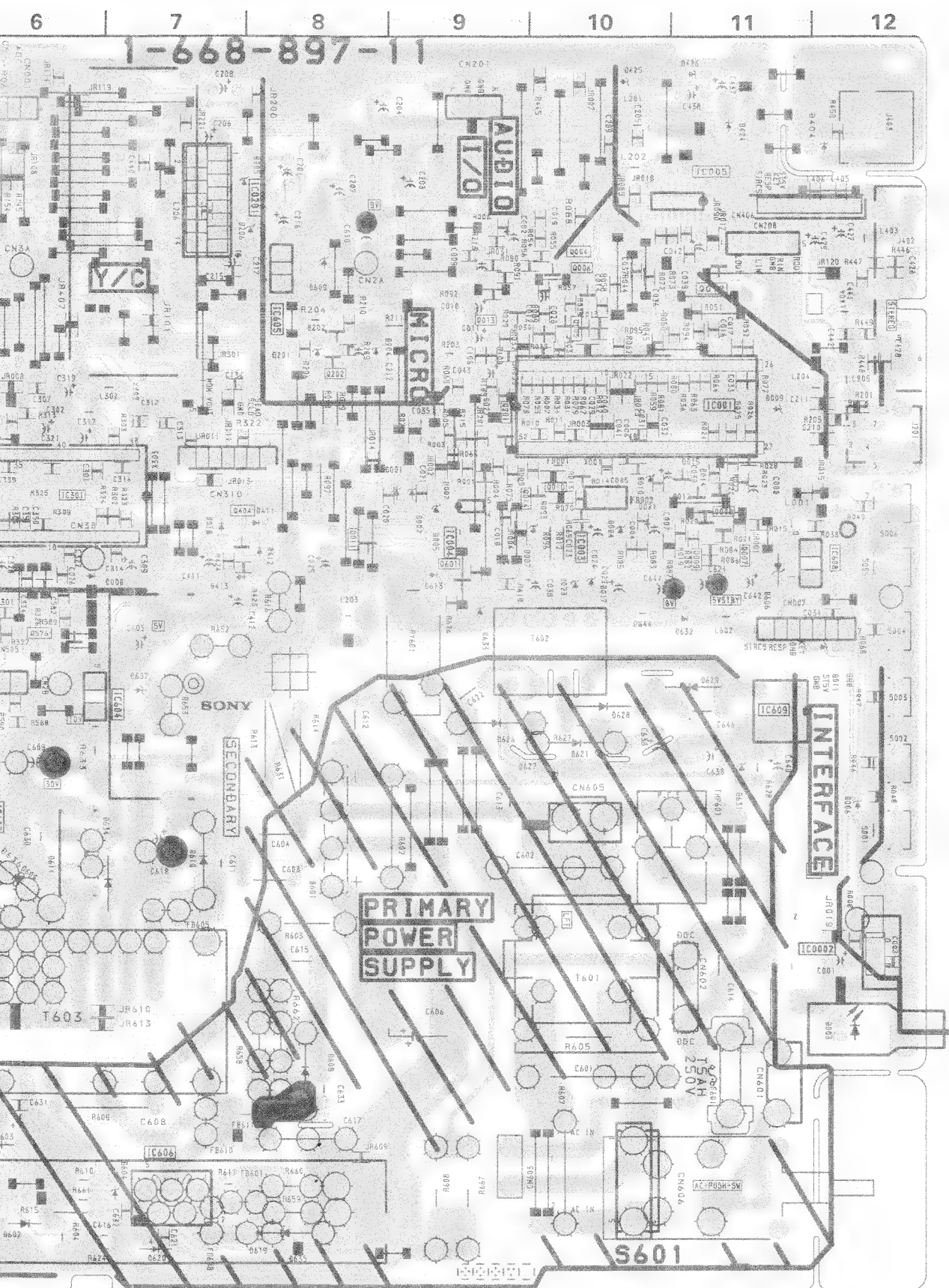
| IC | | DIODE | | D539 | F - 2 |
|------------|--------|-------|--------|------|--------|
| IC001 | C - 11 | D001 | D - 8 | D571 | F - 5 |
| IC003 | D - 10 | D002 | D - 8 | D601 | G - 8 |
| IC004 | D - 9 | D004 | D - 10 | D602 | I - 6 |
| IC005 | B - 11 | D007 | D - 9 | D603 | H - 6 |
| IC101 | A - 4 | D008 | D - 7 | D605 | G - 6 |
| IC201 | B - 7 | D009 | C - 11 | D608 | H - 8 |
| IC301 | D - 6 | D010 | D - 10 | D610 | F - 7 |
| IC501 | I - 4 | D011 | E - 12 | D613 | E - 9 |
| IC531 | C - 4 | D012 | D - 11 | D614 | G - 6 |
| IC603 | F - 6 | D014 | D - 11 | D619 | I - 8 |
| IC604 | E - 6 | D015 | D - 11 | D621 | F - 10 |
| IC605 | C - 8 | D017 | E - 10 | D626 | F - 9 |
| IC606 | I - 7 | D018 | D - 7 | D627 | F - 9 |
| IC608 | D - 12 | D023 | E - 10 | D628 | E - 10 |
| IC609 | E - 11 | D101 | B - 2 | D629 | E - 11 |
| TRANSISTOR | | D104 | A - 3 | D631 | F - 11 |
| Q004 | B - 9 | D201 | C - 8 | D632 | E - 10 |
| Q005 | C - 10 | D202 | C - 8 | D633 | E - 9 |
| Q006 | B - 9 | D204 | C - 9 | | |
| Q007 | D - 10 | D205 | B - 8 | | |
| Q008 | D - 11 | D206 | B - 7 | | |
| Q009 | D - 11 | D306 | C - 6 | | |
| Q010 | D - 10 | D307 | C - 6 | | |
| Q011 | D - 8 | D308 | E - 5 | | |
| Q012 | B - 11 | D309 | E - 5 | | |
| Q013 | B - 9 | D405 | C - 1 | | |
| Q101 | B - 5 | D406 | C - 2 | | |
| Q107 | A - 3 | D407 | D - 2 | | |
| Q109 | B - 2 | D409 | B - 1 | | |
| Q110 | B - 2 | D415 | D - 2 | | |
| Q111 | A - 2 | D417 | D - 2 | | |
| Q112 | A - 2 | D422 | C - 1 | | |
| Q202 | C - 8 | D423 | C - 1 | | |
| Q401 | B - 2 | D427 | B - 2 | | |
| Q405 | B - 2 | D501 | I - 4 | | |
| Q408 | B - 2 | D502 | H - 4 | | |
| Q501 | I - 5 | D511 | G - 3 | | |
| Q532 | E - 2 | D512 | H - 3 | | |
| Q533 | F - 1 | D513 | I - 3 | | |
| Q535 | D - 1 | D514 | I - 3 | | |
| Q571 | F - 5 | D534 | D - 3 | | |
| Q574 | E - 5 | D535 | F - 4 | | |
| Q575 | E - 6 | D536 | F - 2 | | |
| Q576 | E - 6 | D538 | F - 4 | | |

A

POWER SUPPLY,
DEFLECTION, TUNING, PROCESSOR
VIDEO SIGNAL PROCESSOR, AV IN/OUT

A Board





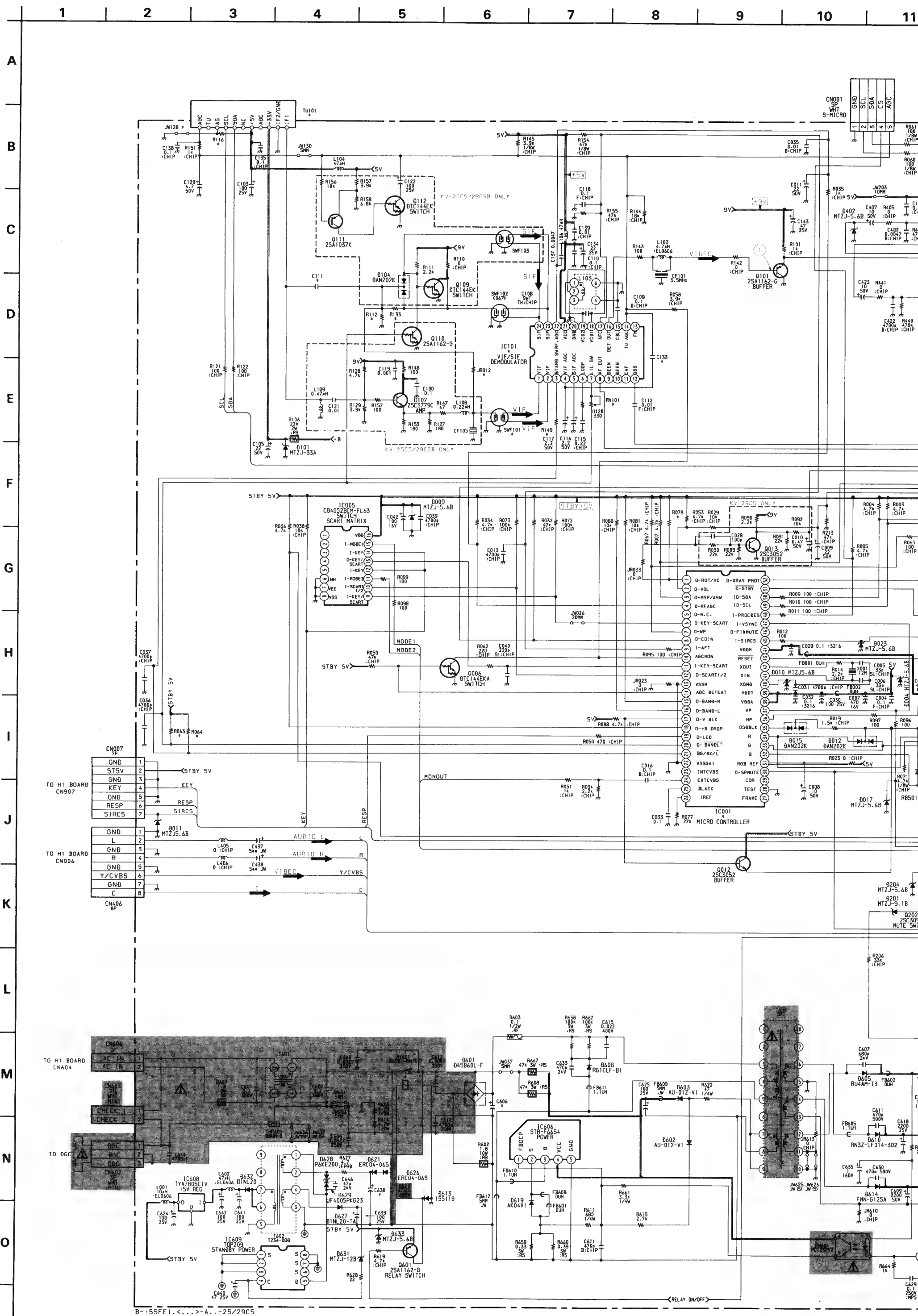
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

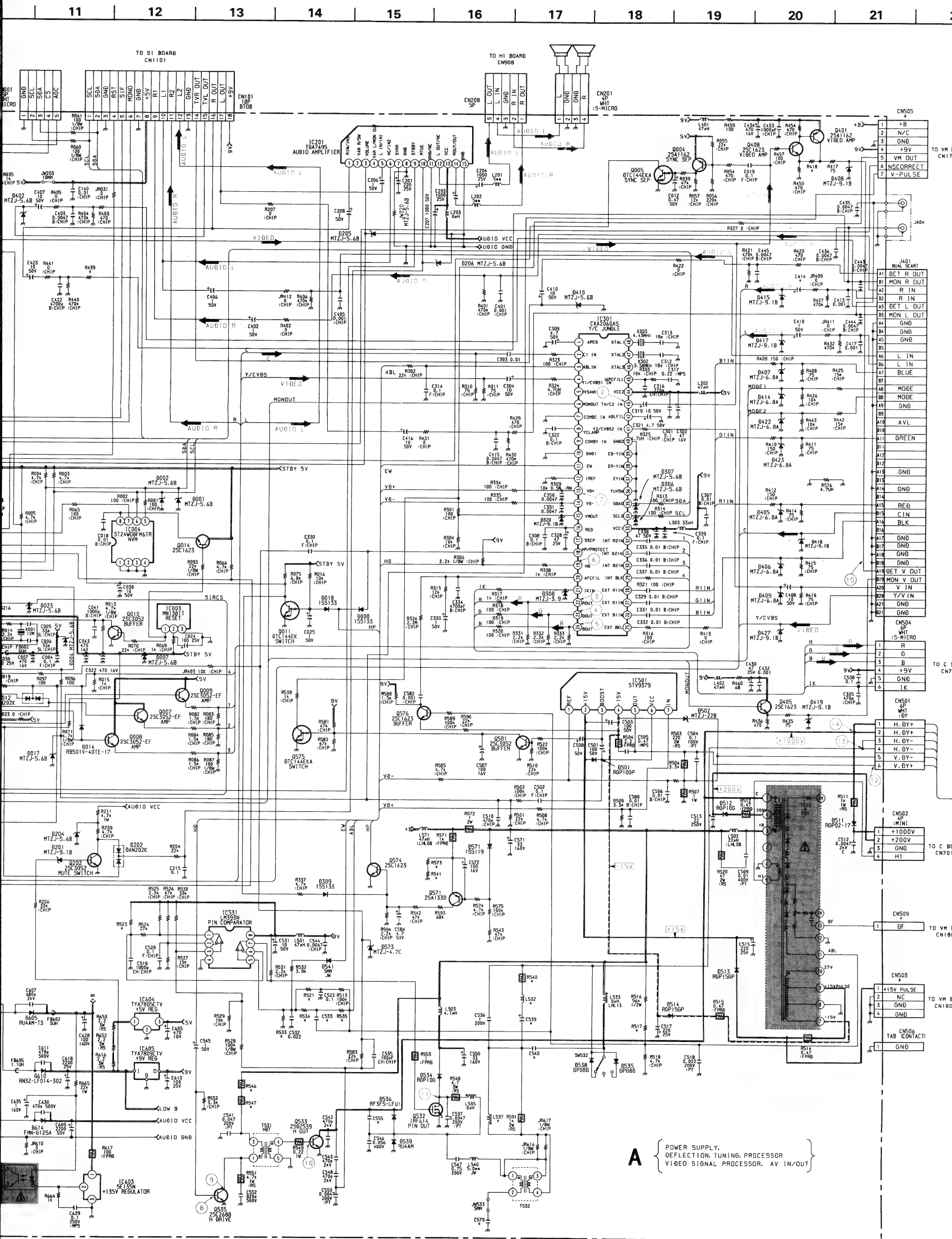
A BOARD TRANSISTOR VOLTAGE TABLE

| Transistor Voltage Table | | | |
|--------------------------|-------------|------------------|----------------|
| Ref No | (B) Base | (C) Collector | (E) Emitter |
| Q004 | 4.7 | 0.7 | 4.9 |
| Q005 | 0.3 | 4.8 | - |
| Q006 | - | 2.0 | - |
| Q007 | - | 4.9 | - |
| Q008 | - | 4.9 | - |
| Q009 | - | 4.9 | - |
| Q010 | 0.6 | - | - |
| Q011 | 0.5 | - | - |
| Q012 | - | 4.8 | - |
| Q101 | 2.0 | - | 2.6 |
| Q109 | - | 4.7 | - |
| Q110 | 4.3 | - | - |
| Q111 | 2.3 | 2.9 | 2.9 |
| Q112 | 2.9 | - | - |
| Q202 | 0.6 | - | - |
| Q401 | 8.0 | 3.4 | 8.6 |
| Q405 | 4.4 | 8.8 | 3.7 |
| Q408 | 2.6 | 8.0 | 2.0 |
| Q532 | 7.3 | 3.1 | - |
| Q533 | -0.2 | -152.0 | - |
| Q535 | -0.7 | 92.0 | - |
| Q571 | 134.2 | - | 134.4 |
| Q574 | - | 2.0 | - |
| Q576 | 3.4 | 6.7 | 2.8 |
| Q601 | 4.0 | 3.6 | 4.8 |

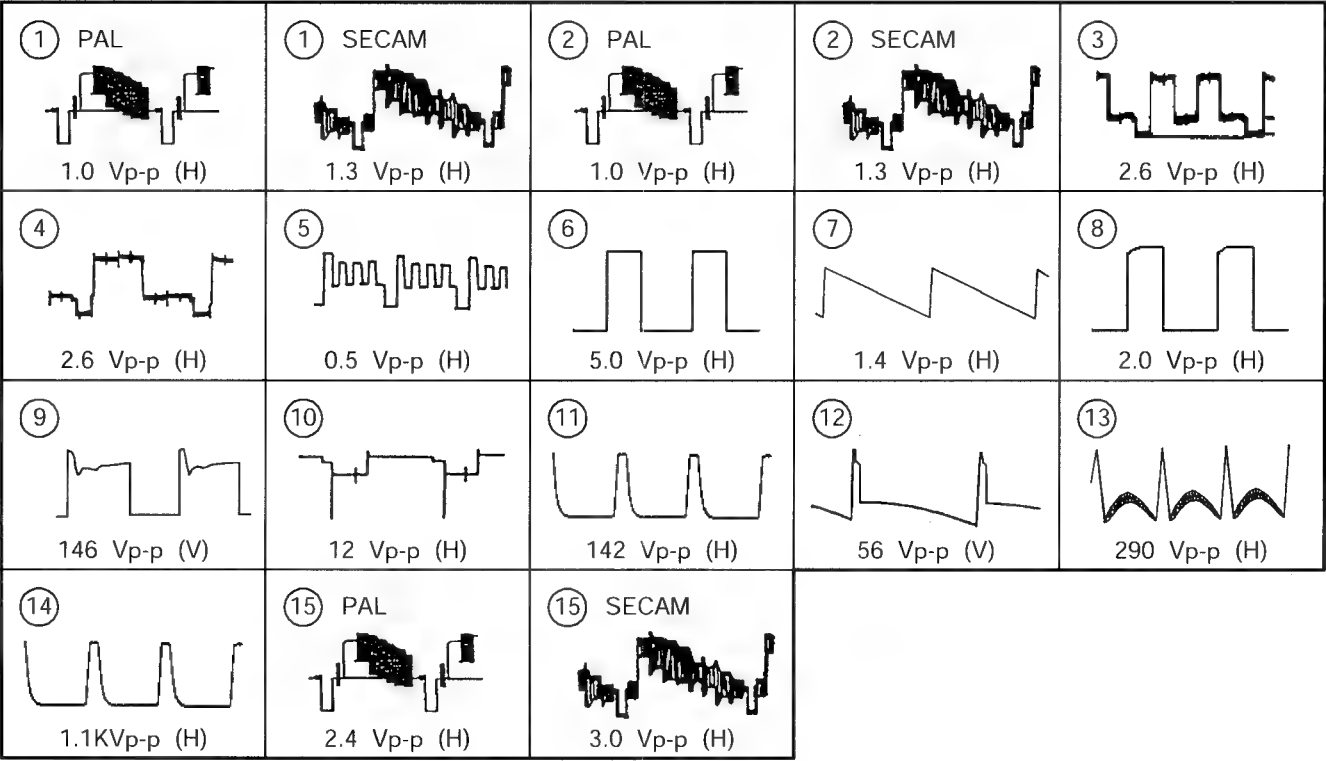
A BOARD IC VOLTAGE TABLE

| IC Voltage Table | | | | | | | | |
|------------------|---------|-------------|--------|---------|-------------|--------|---------|-------------|
| Ref No | Pin No | Voltage (V) | Ref No | Pin No | Voltage (V) | Ref No | Pin No | Voltage (V) |
| IC001 | 4 | 0.8 | IC101 | 1 - 2 | 3.2 | IC301 | 34 - 35 | 3.3 |
| | 6 | 3.2 | | 3 | 4.8 | | 41 | 5.0 |
| | 7 - 8 | 4.8 | | 4 | 3.0 | | 42 | 8.6 |
| | 9 | 0.3 | | 5 | 2.8 | | 43 | 5.0 |
| | 10 | 2.0 | | 6 | 2.7 | | 44 | 8.8 |
| | 11 | 1.5 | | 7 | 3.9 | | 45 | 5.2 |
| | 12 | 4.7 | | 8 | 2.2 | | 48 | 1.5 |
| | 19 | 3.6 | | 12 | 2.0 | IC201 | 1 | 15.3 |
| | 20 | 4.3 | | 15 | 1.5 | | 5 | 15.3 |
| | 21 | 4.8 | | 17 | 0.3 | | 7 | 15.3 |
| | 24 | 2.5 | | 18 - 19 | 2.6 | | 10 | 4.5 |
| | 25 | 2.1 | | 21 | 4.7 | | 12 | 15.3 |
| | 26 | 2.4 | | 22 | 0.9 | | 13 | 31.2 |
| | 30 | 4.8 | | 23 - 24 | 3.2 | | 14 | 15.3 |
| | 31 | 5.0 | IC301 | 1 | 3.3 | IC501 | 1 | 1.4 |
| | 36 | 0.2 | | 2 | 5.0 | | 2 | 14.0 |
| | 37 | 0.1 | | 3 | 4.3 | | 3 | -13.0 |
| | 38 - 39 | 5.0 | | 4 | 5.0 | | 4 | -14.0 |
| | 41 - 42 | 2.2 | | 6 | 4.4 | | 5 | 0.2 |
| | 44 | 4.8 | | 8 | 4.5 | | 6 | 14.5 |
| | 45 | 2.8 | | 11 | 3.9 | | 7 | 1.4 |
| | 47 | 0.1 | | 12 | 2.4 | IC531 | 1 | 1.6 |
| | 48 | 2.4 | | 13 | 3.5 | | 2 | 1.7 |
| | 49 | 3.3 | | 14 | 3.4 | | 3 | 1.9 |
| | 50 | 3.1 | | 15 | 5.6 | | 5 | 2.8 |
| | 51 | 0.1 | | 16 | 7.6 | | 6 | 2.0 |
| | 5 - 6 | 4.8 | | 18 | 1.3 | | 7 | 7.3 |
| IC004 | 7 | 3.3 | | 19 | 2.4 | | 8 | 8.8 |
| | 8 | 3.2 | | 20 | 3.8 | IC606 | 1 - 2 | -60.0 |
| | 9 | 3.2 | | 21 | 1.6 | | 4 | -51.3 |
| IC005 | 10 | 4.7 | | 22 - 24 | 1.5 | IC609 | 4 | -58.0 |
| | 12 | 4.7 | | 26 - 28 | 4.5 | | | |
| | 13 | 1.5 | | 30 | 4.5 | | | |
| | 14 | 4.7 | | 31 - 32 | 4.4 | | | |
| | 16 | 4.7 | | 33 | 8.1 | | | |





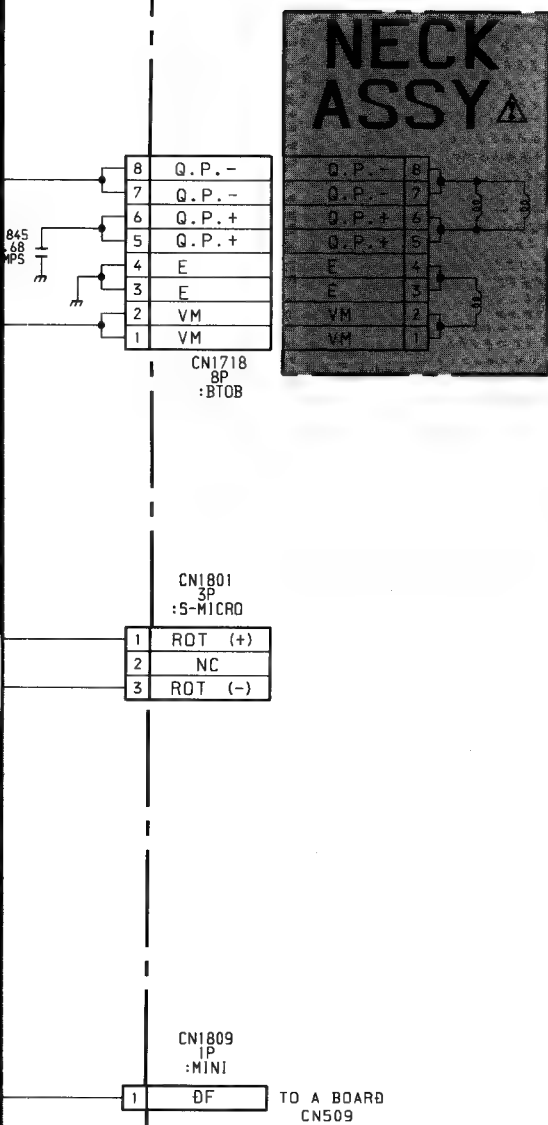
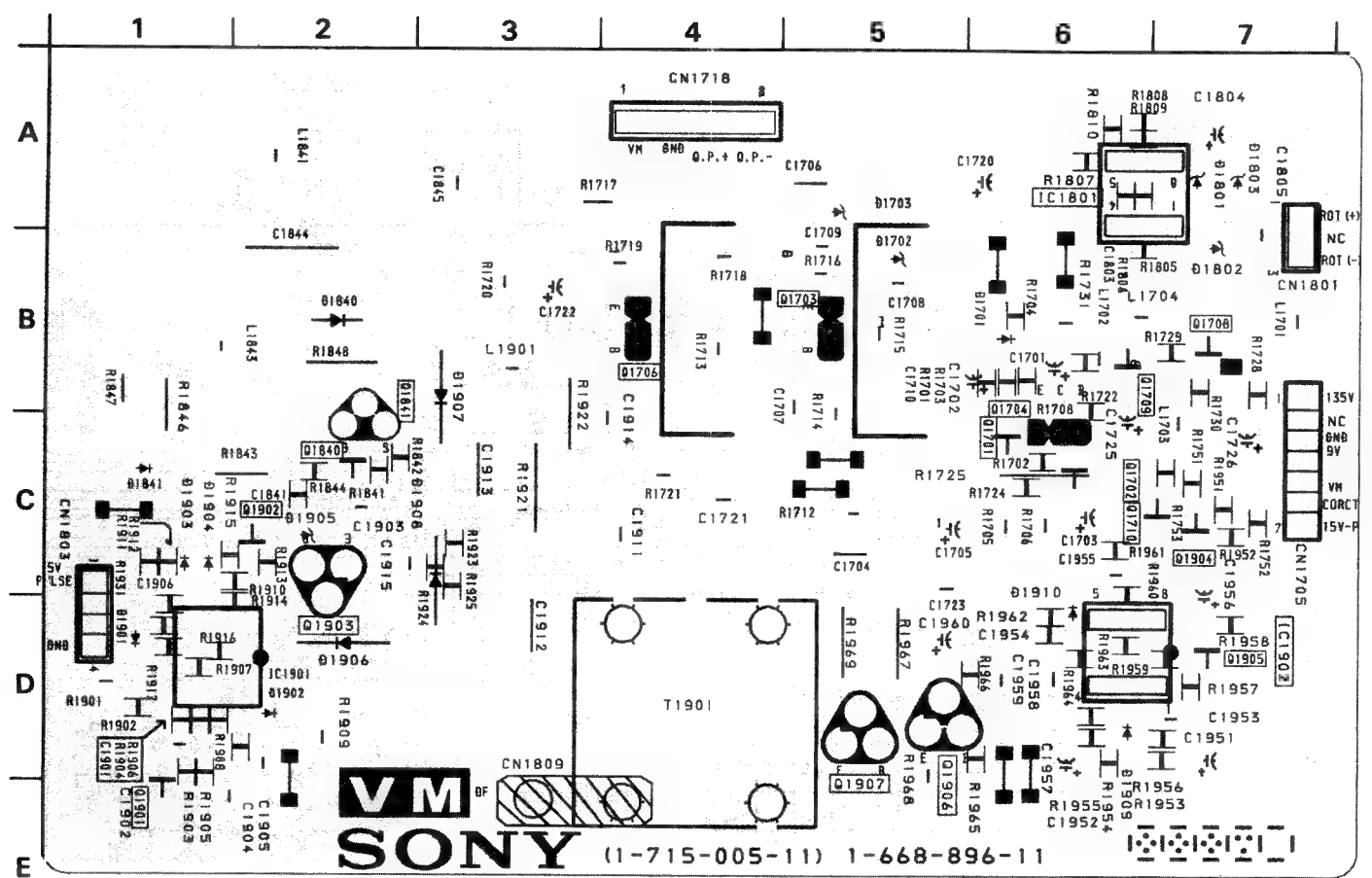
WAVEFORMS A BOARD



A BOARD * MARK

| Ref | 25C5A | 25C5B | 25C5D | 25C5E | 25C5K | 25C5R | 29C5A | 29C5B | 29C5D | 29C5E | 29C5K | 29C5R |
|--------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|--------------------|--------------------|--------------------|---------------------|
| C111 | 0 | 0.01MF | 0 | 0 | 0 | 0 | 0 | 0.01MF | 0 | 0 | 0 | 0 |
| C133 | - | 1MF | - | - | - | - | - | 1MF | - | - | - | - |
| C414 | 0.001MF | 0.001MF | 0.001MF | 0.001MF | 0.001MF | 0.001MF | 1MF | 1MF | 1MF | 1MF | 1MF | 1MF |
| C533 | - | 0.0047MF | - | - | - | - | 0.0047MF | 0.0047MF | 0.0047MF | 0.0047MF | 0.0047MF | 0.0047MF |
| C539 | 10MF | 10MF | 10MF | 10MF | 10MF | 10MF | 1MF | 1MF | 1MF | 1MF | 1MF | 1MF |
| C540 | 0.068MF | 0.068MF | 0.068MF | 0.068MF | 0.068MF | 0.068MF | 0.033MF | 0.033MF | 0.033MF | 0.033MF | 0.033MF | 0.033MF |
| C555 | 18000P | 18000P | 18000P | 1800P | 18000P | 18000P | 1500P | 1500P | 1500P | 1500P | 1500P | 1500P |
| C579 | LEAD JUMPER (5.0MM) | LEAD JUMPER (5.0MM) | LEAD JUMPER (5.0MM) | LEAD JUMPER (5.0MM) | LEAD JUMPER (5.0MM) | LEAD JUMPER (5.0MM) | - | - | - | - | - | - |
| C606 | 330MF 400V | 330MF 400V | 330MF 400V | 330MF 400V | 330MF 400V | 330MF 450V | 330MF 400V | 330MF 400V | 330MF 400V | 330MF 400V | 330MF 400V | 330MF 450V |
| C638 | 10MF 400V | 10MF 400V | 10MF 400V | 10MF 400V | 10MF 400V | 10MF 450V | 10MF 400V | 10MF 400V | 10MF 400V | 10MF 400V | 10MF 400V | 10MF 450V |
| CN503 | - | - | - | - | - | - | 4P | 4P | 4P | 4P | 4P | 4P |
| CN505 | - | - | - | - | - | - | 7P | 7P | 7P | 7P | 7P | 7P |
| CN509 | - | - | - | - | - | - | 1P | 1P | 1P | 1P | 1P | 1P |
| IC001 | SAA5497PS/ M1A/040 | SAA5497PS/ M1A/038 | SAA5497PS/ M1A/040 | SAA5497PS/ M1A/038 | SAA5497PS/ M1A/038 | SAA5497PS/ M1A/039 | SAA5497PS/ M1A/040 | SAA5497PS/ M1A/038 | SAA5497PS/ M1A/040 | SAA5497PS/ M1A/038 | SAA5497PS/ M1A/038 | SAA5497PS/ M1A/039 |
| IC101 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 | TDA9817/V1 |
| JR012 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 |
| JW128 | - | LEAD JUMPER (5.0MM) | - | - | - | LEAD JUMPER (5.0MM) | - | LEAD JUMPER (5.0MM) | - | - | - | LEAD JUMPER (5.0MM) |
| JW410 | - | LEAD JUMPER (5.0MM) | - | - | - | LEAD JUMPER (5.0MM) | - | LEAD JUMPER (5.0MM) | - | - | - | LEAD JUMPER (5.0MM) |
| L532 | 2.2MMH | 2.2MMH | 2.2MMH | 2.2MMH | 2.2MMH | 2.2MMH | 3.3MMH | 3.3MMH | 3.3MMH | 3.3MMH | 3.3MMH | 3.3MMH |
| L537 | 1-416-214-11 | 1-416-214-11 | 1-416-214-11 | 1-416-214-11 | 1-416-214-11 | 1-416-214-11 | 1-409-855-11 | 1-409-855-11 | 1-409-855-11 | 1-409-855-11 | 1-409-855-11 | 1-409-855-11 |
| R063 | - | 4.7K | - | - | - | - | - | 4.7K | - | - | - | - |
| R064 | - | 4.7K | - | - | - | - | - | 4.7K | - | - | - | - |
| R078 | - | - | - | - | - | - | 4.7K | 4.7K | 4.7K | 4.7K | 4.7K | 4.7K |
| R112 | - | 2.2K | - | - | - | - | - | 2.2K | - | - | - | - |
| R116 | - | - | - | 47K | 47K | - | - | - | - | 47K | 47K | - |
| R133 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 |
| R149 | - | 1K | - | - | - | - | - | 1K | - | - | - | - |
| R418 | 470 ½W | 470 ¼W | 470 ½W | 470 ½W | 470 ¼W | 470 ½W | 470 ½W | 470 ¼W | 470 ½W | 470 ½W | 470 ¼W | 470 ½W |
| R439 | 1K | 1K | 1K | 1K | 1K | 1K | 470 | 470 | 470 | 470 | 470 | 470 |
| R517 | 27K | 27K | 27K | 27K | 27K | 27K | 10K | 10K | 10K | 10K | 10K | 10K |
| R521 | 680K | 680K | 680K | 680K | 680K | 680K | 1M | 1M | 1M | 1M | 1M | 1M |
| R523 | 680K | 680K | 680K | 680K | 680K | 680K | 1M | 1M | 1M | 1M | 1M | 1M |
| R533 | 22K | 22K | 22K | 22K | 22K | 22K | 10K | 10K | 10K | 10K | 10K | 10K |
| R534 | 270K | 270K | 270K | 270K | 270K | 270K | 470K | 470K | 470K | 470K | 470K | 470K |
| R535 | 330K | 330K | 330K | 330K | 330K | 330K | 150K | 150K | 150K | 150K | 150K | 150K |
| R540 | 56 | 56 | 56 | 56 | 56 | 56 | 47 | 47 | 47 | 47 | 47 | 47 |
| R541 | 82K | 82K | 82K | 82K | 82K | 82K | 100K | 100K | 100K | 100K | 100K | 100K |
| R546 | 47 | 47 | 47 | 47 | 47 | 47 | 1.5K | 1.5K | 1.5K | 1.5K | 1.5K | 1.5K |
| R547 | LEAD JUMPER (7.5M) | LEAD JUMPER (7.5M) | LEAD JUMPER (7.5M) | LEAD JUMPER (7.5M) | LEAD JUMPER (7.5M) | LEAD JUMPER (7.5M) | 1.5K | 1.5K | 1.5K | 1.5K | 1.5K | 1.5K |
| R573 | 150K | 150K | 150K | 150K | 150K | 150K | 100K | 100K | 100K | 100K | 100K | 100K |
| RV101 | - | 22K | - | - | - | - | - | 22K | - | - | - | - |
| SWF101 | 1-767-874-11 | 1-579-273-11 | 1-767-874-11 | 1-767-874-11 | 1-767-874-11 | 1-767-874-11 | 1-767-874-11 | 1-579-273-11 | 1-767-874-11 | 1-767-874-11 | 1-767-874-11 | 1-767-874-11 |
| T511 | NX-1680 | NX-1680 | NX-1680 | NX-1680 | NX-1680 | NX-1680 | NX-1681 | NX-1681 | NX-1681 | NX-1681 | NX-1681 | NX-1681 |
| TU101 | BTP-AC402 | TELE9-001A | BTP-AC402 | BTP-AC411 | BTP-AC411 | BTP-AC402 | BTP-AC402 | TELE9-001A | BTP-AC402 | BTP-AC411 | BTP-AC411 | BTP-AC402 |

VM Board



VM BOARD IC VOLTAGE TABLE

| IC Voltage Table | | |
|------------------|--------|-------------|
| Ref No | Pin No | Voltage (V) |
| IC1801 | 1 - 3 | 5.0 |
| | 5 - 6 | 4.3 |
| | 7 | 3.7 |
| | 8 | 8.0 |
| | 9 | 4.8 |
| IC1901 | 1 | 1.7 |
| | 2 | 4.0 |
| | 3 | 4.5 |
| | 5 | 6.7 |
| | 6 | 6.8 |
| | 7 | 3.6 |
| | 8 | 8.0 |
| IC1902 | 1 - 3 | 2.8 |
| | 5 - 6 | 5.2 |
| | 7 | 5.0 |
| | 8 | 8.0 |

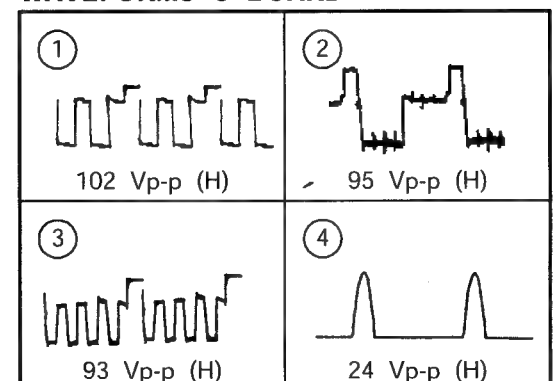
C BOARD TRANSISTOR VOLTAGE TABLE

| Ref No | (B) Base | (C) Collector | (E) Emitter |
|--------|-------------|------------------|----------------|
| Q702 | 1.5 | 8.3 | 1.1 |
| Q703 | 8.8 | 169.8 | 8.3 |
| Q704 | 169.5 | 1.9 | 209.5 |
| Q705 | 1.5 | 8.3 | 1.1 |
| Q706 | 8.8 | 170.7 | 8.3 |
| Q707 | 170.5 | 1.9 | 215.7 |
| Q708 | 1.5 | 8.3 | 1.0 |
| Q709 | 8.9 | 171.3 | 8.3 |
| Q710 | 171.2 | 1.9 | 206.3 |

VM BOARD TRANSISTOR VOLTAGE TABLE

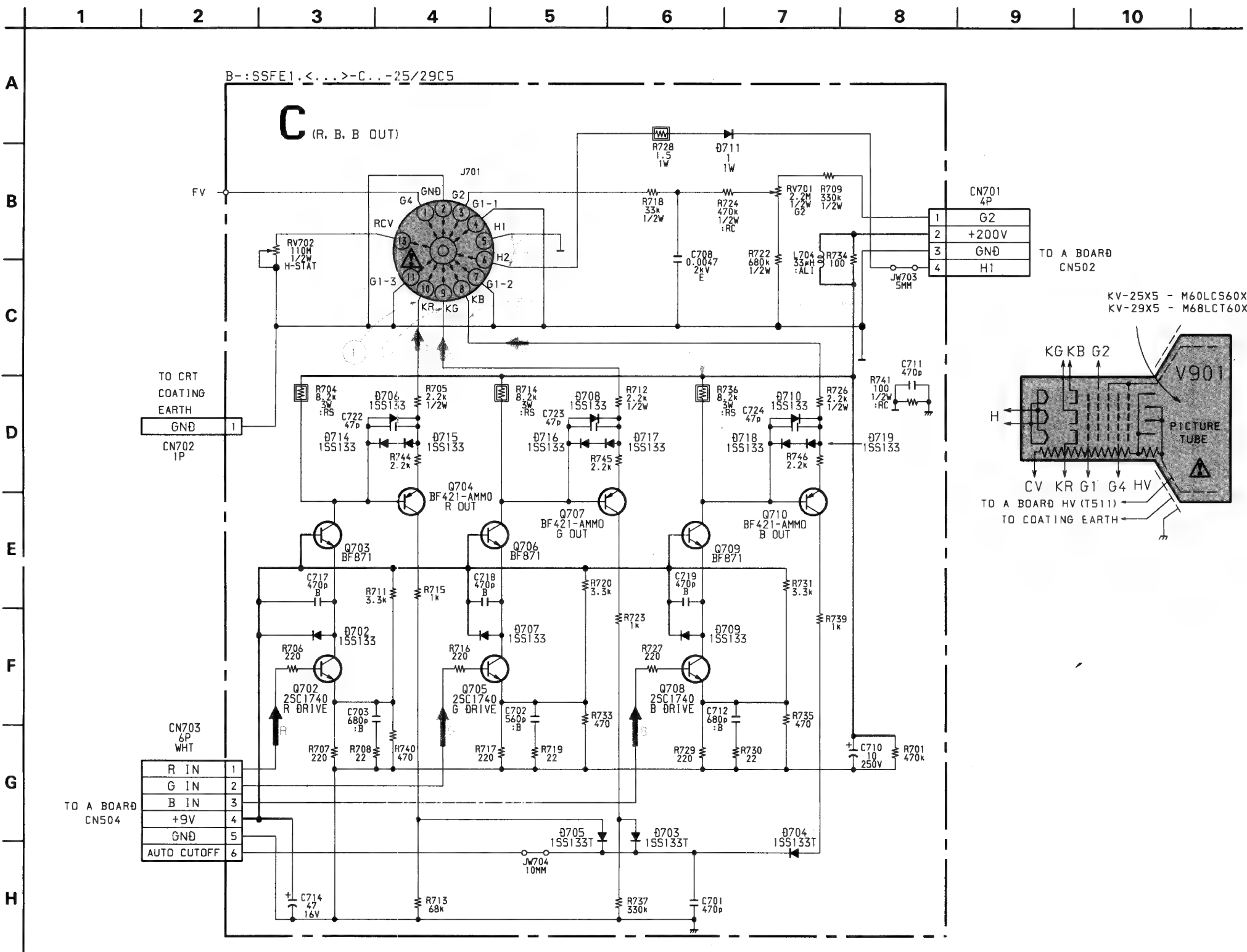
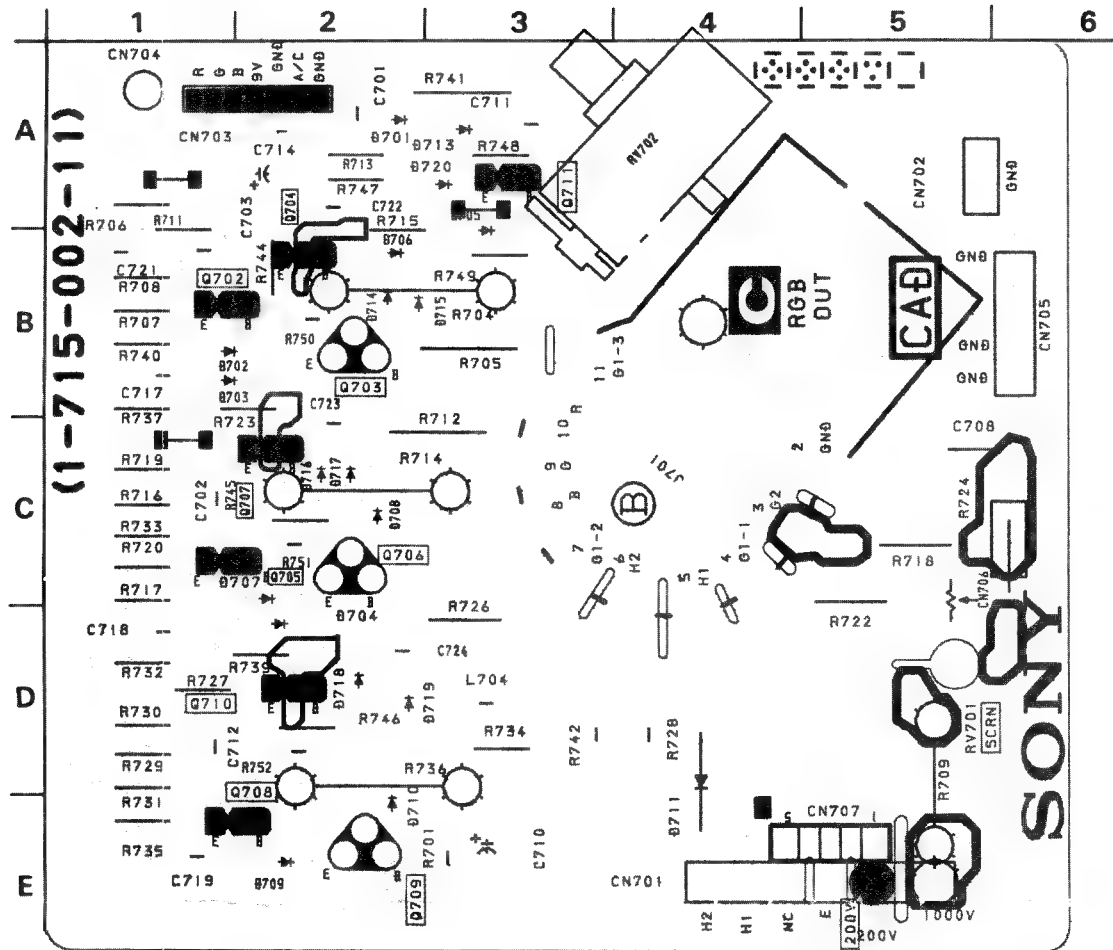
| Ref No | (B) Base | (C) Collector | (E) Emitter |
|--------|-------------|------------------|----------------|
| Q1701 | 2.4 | 8.7 | 1.8 |
| Q1702 | 2.4 | 6.5 | 1.8 |
| Q1703 | 133.4 | 52.0 | 133.8 |
| Q1704 | 8.7 | 8.5 | 5.8 |
| Q1706 | 0.8 | 52.0 | 0.5 |
| Q1708 | 5.0 | 2.1 | 5.6 |
| Q1709 | 5.4 | 8.0 | 4.7 |
| Q1710 | 5.6 | 8.0 | 5.0 |
| Q1840 | -0.3 | 4.7 | - |
| Q1901 | 0.4 | 1.3 | - |
| Q1902 | 0.4 | 0.3 | - |
| Q1903 | 0.3 | 62.0 | - |
| Q1904 | - | 8.0 | 0.1 |
| Q1905 | 2.7 | 6.5 | 2.2 |
| Q1906 | 4.0 | 68.8 | 3.4 |
| Q1907 | 68.7 | 122.2 | 68.2 |
| | Gate | Drain | Source |
| Q1841 | 4.7 | 18.0 | - |

WAVEFORMS C BOARD



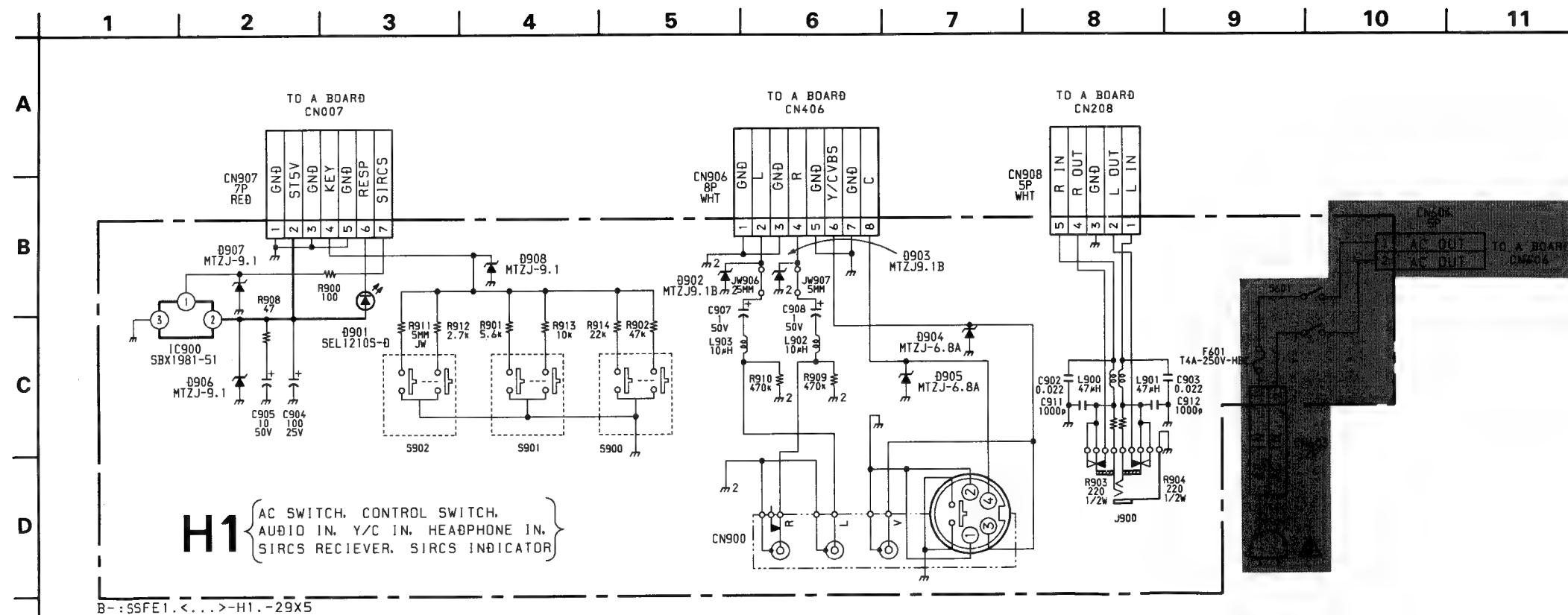
C [RGB OUT]

C Board

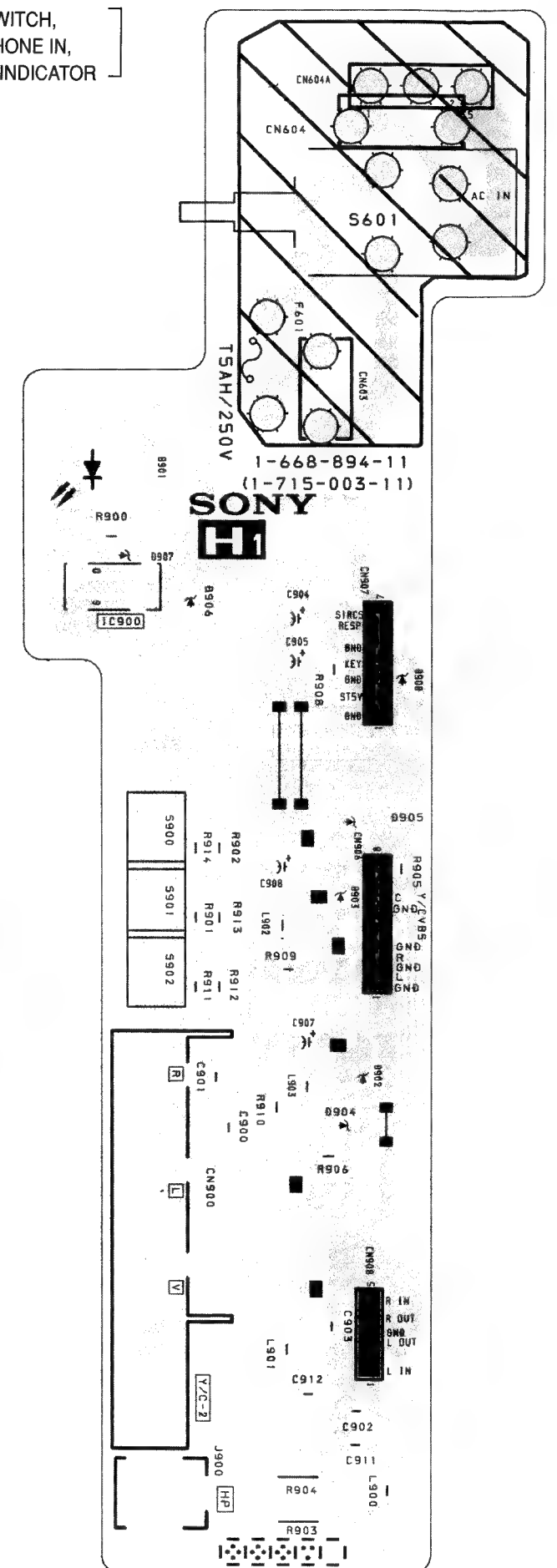


H1

AC SWITCH, CONTROL SWITCH,
AUDIO IN, Y/C IN, HEADPHONE IN,
SIRCS RECIEVER, SIRCS INDICATOR

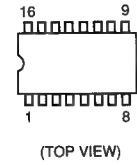


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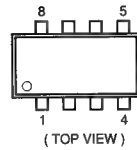


5-4 SEMICONDUCTORS

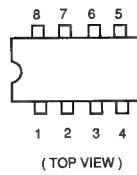
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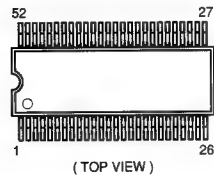
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NJM4558M-TE2
NJM2903D



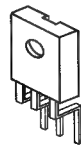
LM393P
TDA2822M
TEA2124



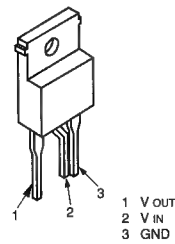
SAA5497PS/MIA/038
SAA5497PS/MIA/039
SAA5497PS/MIA040



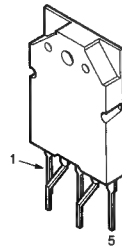
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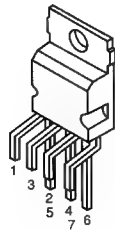
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SE135N-LF12



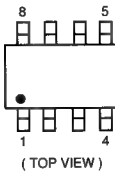
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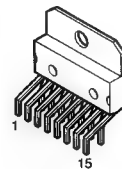
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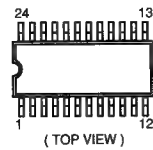
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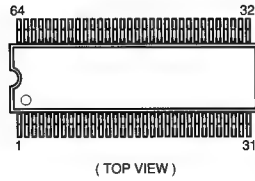
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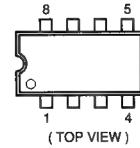
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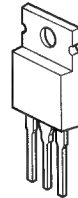
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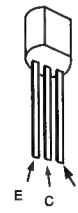
TOP209P



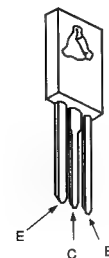
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TYA7809CTV



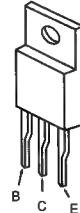
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2SA1091-O



2SC688-LK



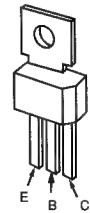
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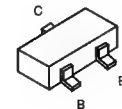
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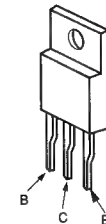
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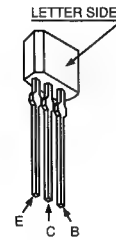
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DTA144ESA-TP
DTC114EK
DTC114EKA-T146
DTC143TKA-T146
DTC144EKA-T-146R
2SA1037K-T-146-
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2SC2412K-QR
2SC2412K-T-146-R



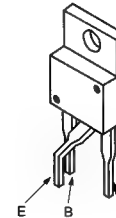
IRF614



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2SC1740S-RT

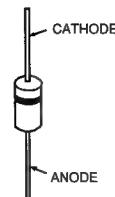


2SK2251-01-F19

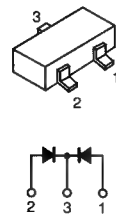


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AU-012-V1
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BYD33G-AMMO
DINL20-TR
ERB44-06TP1
EG-1Z-V1
EL1Z
ERD28-06S

ERD28-08S
ERC06-15
FMN-G12S
RG1CLF-B1
RGP10GPKG23
RU3YX-LF-C4
RU3YX-V1
RU-4AM-T3
1SS292T-77

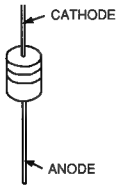


DAN202K
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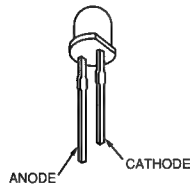


ERA81-004TP1
ERA83-006
MTZJ-T-77-3.9B
MTZJ-T-77-5.6B
MTZJ-T-77-5.6C
MTZJ-T-77-6.8A
MTZJ-T-77-6.8C
MTZJ-T-77-7.5C
MTZJ-T-77-9.1A
MTZJ-T-77-9.1A
MTZJ-T-77-10

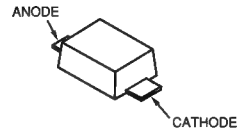
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MTZJ-33C
MTZJ-7.5B
RD3.9ES-B2
RD5.6ESB2
RD6.8ES-B2
RD7.5ESB2
RD9.1ES-B3
1SS119-25TD
1SS133T-77



SEL12108-D

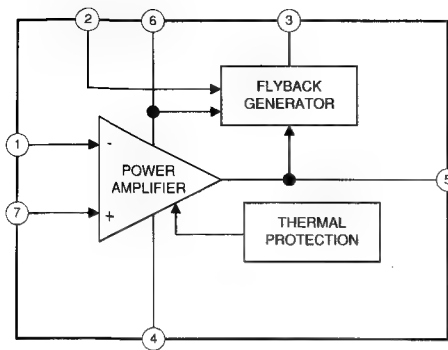


UF4005PK623

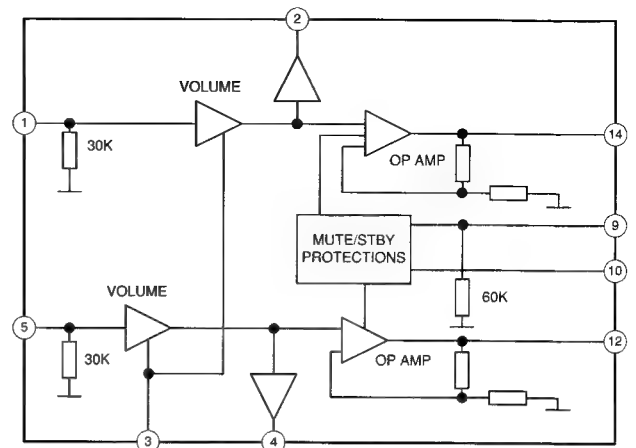


5-5. IC BLOCK DIAGRAMS

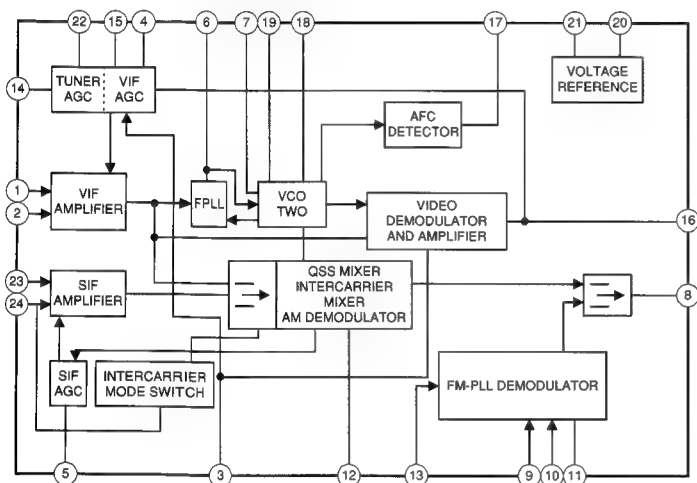
A BOARD IC501 STV 9379



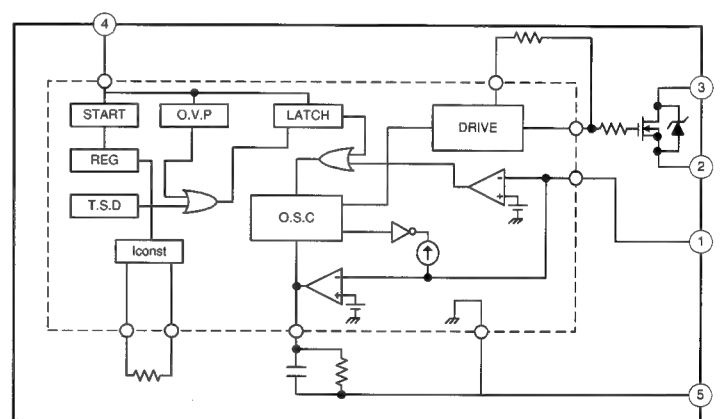
A BOARD IC201 TDA7495



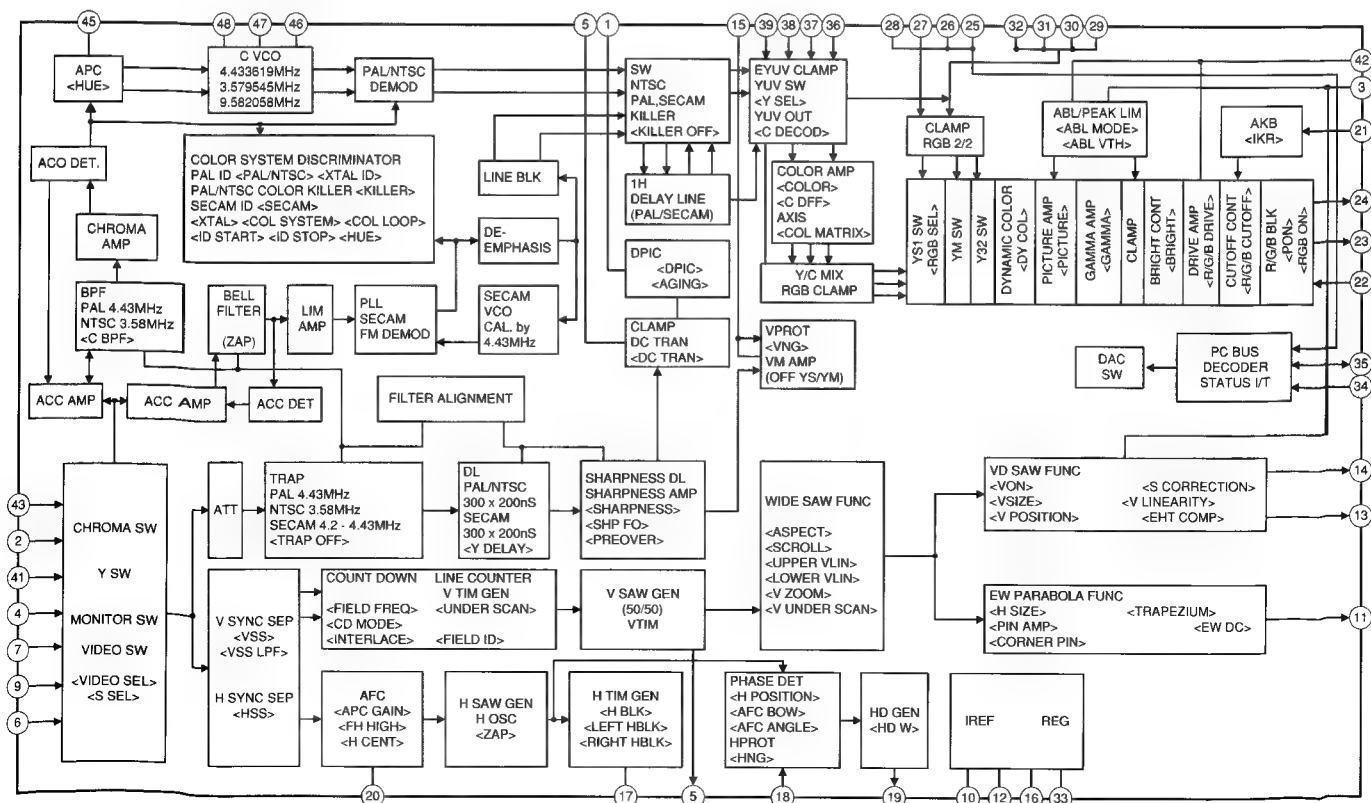
A BOARD IC101 TDA9817/V1



A BOARD IC606 STR-F6654



A BOARD IC301 CXA2060AS



SECTION 6 EXPLODED VIEWS

NOTE :

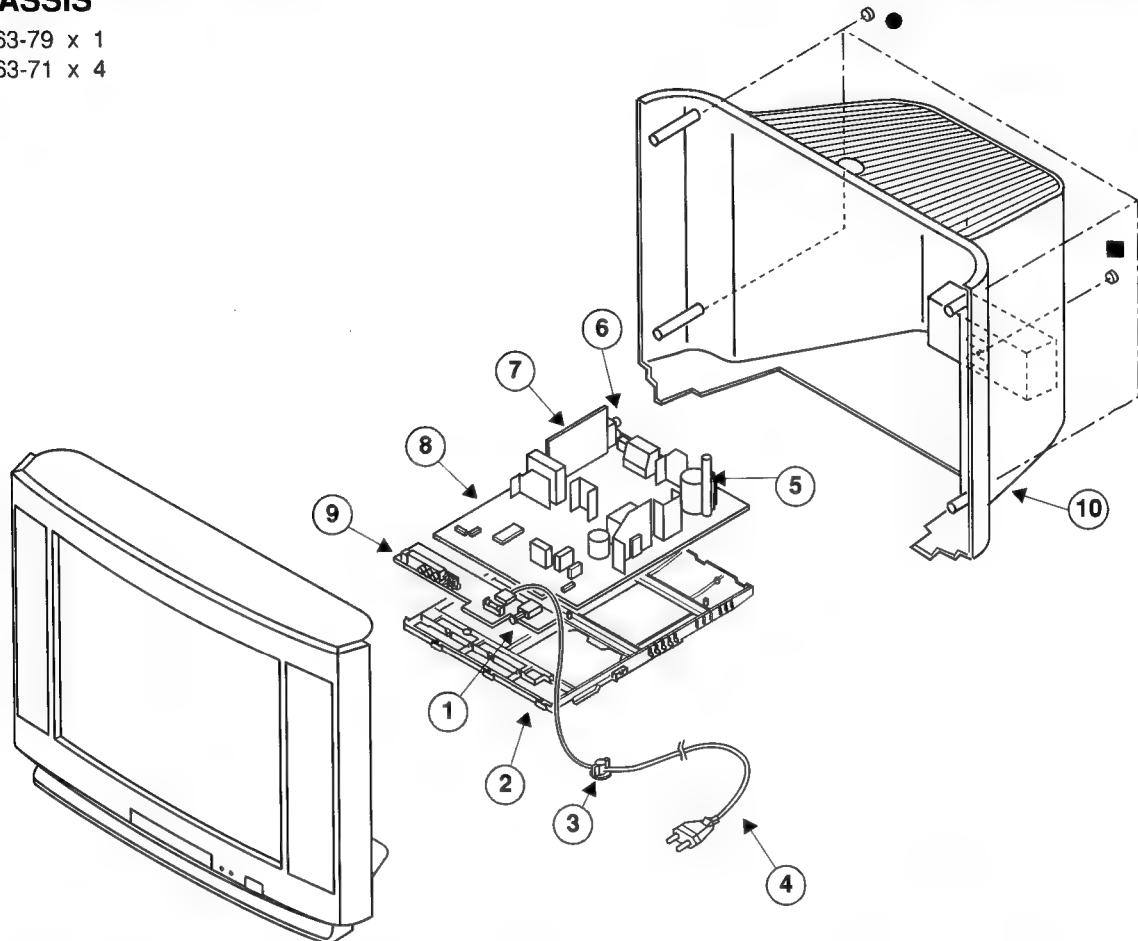
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

6-1. CHASSIS

- 7-685-663-79 x 1
- 7-685-663-71 x 4

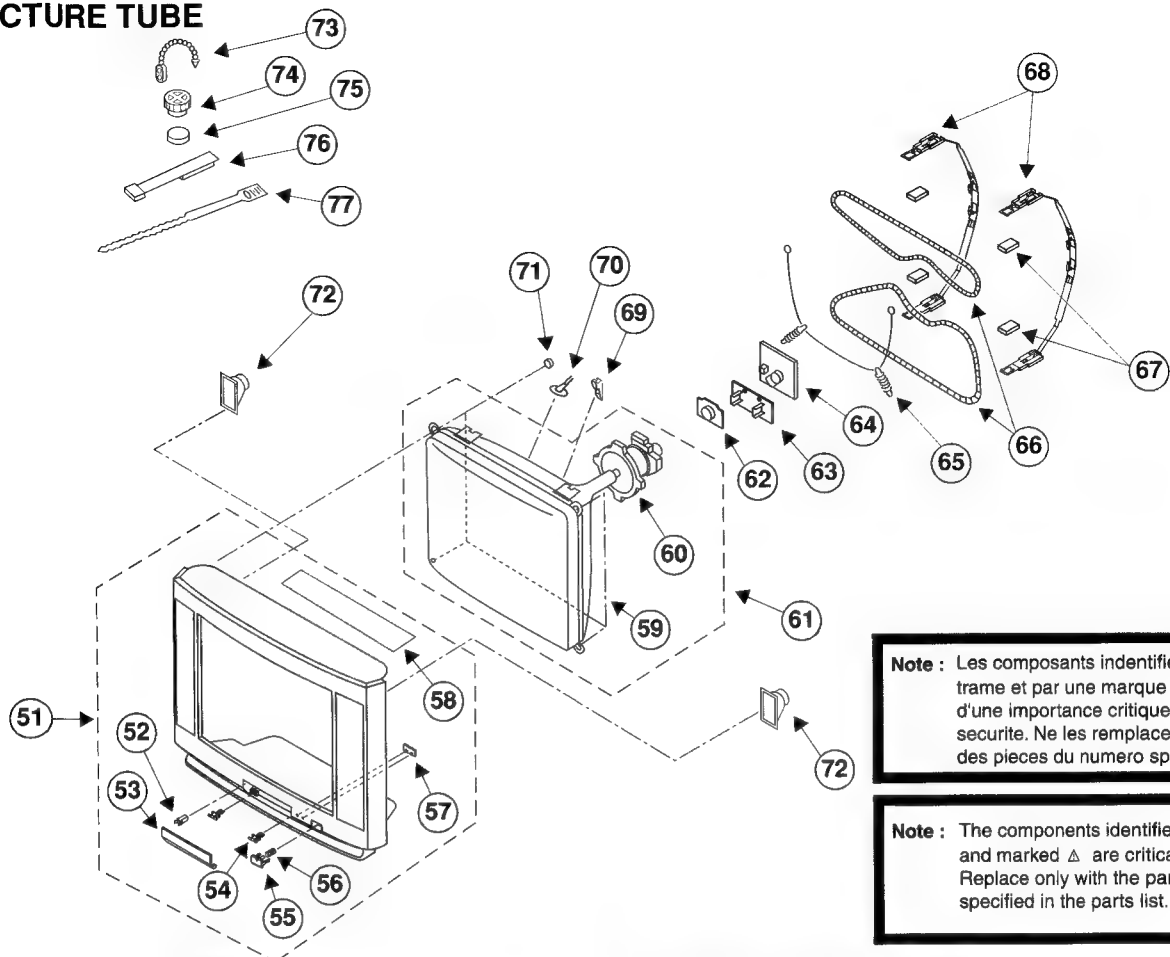
Note : Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.



| REF. NO. | PART. NO. | DESCRIPTION | REMARK | REF. NO. | PART. NO. | DESCRIPTION | REMARK |
|----------|----------------|---|--------|----------|---------------|---|--------|
| 1 | Δ 1-571-433-21 | SWITCH, PUSH (AC POWER) | | 8 | *A-1632-750-A | A BOARD, COMPLETE (KV-25C5A) | |
| 2 | *4-202-998-01 | BRACKET, MAIN | | | *A-1632-748-A | A BOARD, COMPLETE (KV-25C5B) | |
| 3 | Δ 4-202-531-01 | AC CORD LOCK (SC) | | | *A-1632-746-A | A BOARD, COMPLETE (KV-25C5D) | |
| 4 | Δ 1-765-286-11 | CORD, POWER | | | *A-1632-747-A | A BOARD, COMPLETE (KV-25C5E) | |
| 5 | Δ 1-453-264-11 | TRANSFORMER ASSY, FLYBACK (NK-1680/U2B4) | | | *A-1632-752-A | A BOARD, COMPLETE (KV-25C5K) | |
| | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | *A-1632-753-A | A BOARD, COMPLETE (KV-25C5R) | |
| | 1-453-265-11 | TRANSFORMER ASSY, FLYBACK (NK-1661/U2B4) | | | *A-1632-721-A | A BOARD, COMPLETE (KV-25C5A) | |
| | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | | *A-1632-716-A | A BOARD, COMPLETE (KV-25C5B) | |
| 6 | 8-598-361-01 | TUNER (BTP-AC402) (KV-25C5A/25C5D/25C5R/29C5A/29C5D/29C5R) | | | *A-1632-715-A | A BOARD, COMPLETE (KV-25C5D) | |
| | 1-693-418-11 | TUNER (TELE9-001A) (KV-25C5B/25C5D/29C5B/29C5D) | | | *A-1632-720-A | A BOARD, COMPLETE (KV-25C5E) | |
| | 8-598-432-00 | TUNER (BTP-AC411) (KV-25C5E/25C5K/29C5E/29C5K) | | | *A-1632-759-A | A BOARD, COMPLETE (KV-25C5K) | |
| 7 | *A-1652-053-A | S1 BOARD, COMPLETE (KV-25C5A/25C5D/25C5R/29C5A/29C5D/29C5R) | | 9 | *A-1646-161-A | H1 BOARD, COMPLETE | |
| | *A-1652-056-A | S1 BOARD, COMPLETE (KV-25C5B/29C5B) | | 10 | 4-202-986-11 | COVER REAR (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | |
| | *A-1652-052-A | S1 BOARD, COMPLETE (KV-25C5E/25C5K/29C5E/29C5K) | | | 4-202-993-11 | COVER REAR (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |

6-2. PICTURE TUBE



| REF. NO. | PART.NO | DESCRIPTION | REMARK | REF. NO. | PART.NO | DESCRIPTION | REMARK |
|----------|----------------|---|--------|----------|----------------|--|--------|
| 51 | X-4200-374-1 | BEZNET ASSY (BLACK) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | 52-58 | 61 | Δ 8-733-254-76 | ITC (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | 59-60 |
| | X-4200-382-2 | BEZNET ASSY (BLACK) (KV-29C5A) | | 62 | Δ 8-453-005-21 | NECK ASSY (NA297-M2) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| | X-4200-382-1 | BEZNET ASSY (BLACK) (KV-29C5B/29C5D/29C5E/29C5K/29C5R) | | 63 | *A-1644-088-A | VM BOARD, COMPLETE (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| | X-4200-382-4 | BEZNET ASSY (GREY) 29" only | | 64 | *A-1638-111-A | C BOARD, COMPLETE | |
| 52 | 4-047-464-01 | CATCHER PUSHER | | 65 | 4-369-318-21 | SPRING, TENSION (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | |
| 53 | 4-204-059-01 | DOOR (PAINTED BLACK) (KV-25C5A/25C5B/ 25C5D/25C5E/25C5K/25C5R) | | | 4-200-433-11 | SPRING, EXTENSION (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| | 4-204-103-11 | DOOR (PAINTED BLACK) (KV-29C5A) | | 66 | Δ 1-406-807-11 | COIL, DEMAGNETIZATION | |
| | 4-204-103-01 | DOOR (PAINTED BLACK) (KV-29C5B/29C5D/ 29C5E/29C5K/29C5R) | | 67 | 4-203-390-11 | CUSHION, DGC (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| | 4-204-103-31 | DOOR (PRINTED) (GREY) | | 68 | 4-202-745-01 | HOLDER, DGC (25") (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | |
| 54 | 3-703-035-11 | SHAFT, LID | | | 4-202-749-01 | HOLDER, DGC (29") (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| 55 | 4-203-344-01 | BUTTON POWER (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | 69 | 3-704-495-01 | SPACER, DY | |
| | 4-203-339-01 | BUTTON POWER (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | 70 | Δ 1-251-317-31 | CAP ASSY, HIGH VOLTAGE | |
| 56 | 4-202-964-01 | SPRING | | 71 | 4-203-043-01 | SCREW (PT) | |
| 57 | 4-204-105-01 | GUIDE, LIGHT | | 72 | 1-505-924-11 | SPEAKER, LOUD (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | |
| 58 | 4-203-553-01 | SHEET BLOTING (KV-25C5A/25C5B/25C5D/ 25C5E/25C5K/25C5R) | | | 1-505-605-11 | SPEAKER, LOUD (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| 59 | Δ 8-733-254-05 | PICTURE TUBE (SD-257) (M60LCS60X) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | 73 | 4-308-870-00 | CLIP, LEAD WIRE | |
| | Δ 8-733-856-05 | PICTURE TUBE (SD-269) (M68LCT60X) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | 74 | 1-452-094-00 | MAGNET, ROTATABLE DISK; 15MM Ø | |
| 60 | Δ 8-451-404-23 | DEFLECTION YOKE (Y25GXABA) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | 75 | 1-452-032-00 | MAGNET, DISK; 10MM Ø | |
| | Δ 8-451-467-12 | DEFLECTION YOKE (Y29GXA2B) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | 76 | X-4387-214-1 | PERMALLOY ASSY, CORRECTION | |
| | | | | 77 | 3-701-007-00 | BAND, BINDING | |

SECTION 7 ELECTRICAL PARTS LIST

When indicating parts by reference number,
please include the board name.

CAPACITORS COILS
MF : mF, PF : mmF MMH : mH , uH

- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- RESISTORS
- All resistors are in ohms.
- F : nonflammable.

Note : Les composants indentifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

A

| REF.NO. | PART.NO | DESCRIPTION | REMARK | REF.NO. | PART.NO | DESCRIPTION | REMARK |
|---------|---------------|---------------------------------------|---------|---------|--------------|---|--------|
| | *A-1632-750-A | A BOARD, COMPLETE (KV-25C5A) ***** | | C028 | 1-163-117-00 | CERAMIC CHIP 100PF 5% 50V (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| | *A-1632-748-A | A BOARD, COMPLETE (KV-25C5B) ***** | | C029 | 1-163-077-00 | CERAMIC CHIP 0.1MF 10% 25V | |
| | *A-1632-746-A | A BOARD, COMPLETE (KV-25C5D) ***** | | C030 | 1-104-665-11 | ELECT 100MF 20% 25V | |
| | *A-1632-747-A | A BOARD, COMPLETE (KV-25C5E) ***** | | C031 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% 50V | |
| | *A-1632-752-A | A BOARD, COMPLETE (KV-25C5K) ***** | | C032 | 1-163-077-00 | CERAMIC CHIP 0.1MF 10% 25V | |
| | *A-1632-753-A | A BOARD, COMPLETE (KV-25C5R) ***** | | C033 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| | *A-1632-721-A | A BOARD, COMPLETE (KV-29C5A) ***** | | C035 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| | *A-1632-716-A | A BOARD, COMPLETE (KV-29C5B) ***** | | C036 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% 50V | |
| | *A-1632-715-A | A BOARD, COMPLETE (KV-29C5D) ***** | | C037 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% 50V | |
| | *A-1632-720-A | A BOARD, COMPLETE (KV-29C5E) ***** | | C038 | 1-126-964-11 | ELECT 10MF 20% 50V | |
| | *A-1632-759-A | A BOARD, COMPLETE (KV-29C5K) ***** | | C039 | 1-163-017-00 | CERAMIC CHIP 0.0047MF 10% 50V | |
| | *A-1632-717-A | A BOARD, COMPLETE (KV-29C5R) ***** | | C040 | 1-163-189-00 | CERAMIC CHIP 220PF 5% 50V | |
| | 4-382-854-01 | SCREW (M3X8), P, SW (+) | | C041 | 1-163-205-00 | CERAMIC CHIP 0.001MF 10% 50V | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | C042 | 1-126-933-11 | ELECT 100MF 20% 16V | |
| | < CAPACITOR > | | | C043 | 1-126-935-11 | ELECT 470MF 20% 16V | |
| C004 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V | C100 | 1-163-038-00 | CERAMIC CHIP 0.1MF 25V (KV-25C5B/29C5B) | |
| C005 | 1-163-105-00 | CERAMIC CHIP 33PF | 5% 50V | C103 | 1-104-665-11 | ELECT 100MF 20% 25V | |
| C006 | 1-163-105-00 | CERAMIC CHIP 33PF | 5% 50V | C105 | 1-126-965-11 | ELECT 22MF 20% 50V | |
| C007 | 1-126-935-11 | ELECT 470MF | 20% 16V | C108 | 1-163-465-11 | CERAMIC CHIP 9PF 0.25PF 50V | |
| C008 | 1-126-964-11 | ELECT 10MF | 20% 50V | C109 | 1-164-004-11 | CERAMIC CHIP 0.1MF 10% 25V | |
| C009 | 1-126-965-11 | ELECT 22MF | 20% 50V | C110 | 1-163-038-00 | CERAMIC CHIP 0.1MF 25V | |
| C010 | 1-126-959-11 | ELECT 0.47MF | 20% 50V | C111 | 1-216-296-00 | SHORT 0 50V (KV-25C5A/25C5D/25C5E/25C5K/25C5R/ 29C5A/29C5D/29C5E/29C5K/29C5R) | |
| C011 | 1-126-965-11 | ELECT 22MF | 20% 50V | | 1-163-059-00 | CERAMIC CHIP 0.01MF 50V (KV-25C5B/29C5B) | |
| C012 | 1-126-959-11 | ELECT 0.47MF | 20% 50V | C112 | 1-163-031-11 | CERAMIC CHIP 0.01MF 50V | |
| C013 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V | C115 | 1-164-489-11 | CERAMIC CHIP 0.22MF 10% 16V | |
| C016 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C116 | 1-126-961-11 | ELECT 2.2MF 20% 50V | |
| C018 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | C117 | 1-126-961-11 | ELECT 2.2MF 20% 50V | |
| C019 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V | C118 | 1-163-038-00 | CERAMIC CHIP 0.1MF 25V | |
| C022 | 1-126-935-11 | ELECT 470MF | 20% 16V | C119 | 1-163-141-91 | CERAMIC CHIP 0.001MF 5% 50V (KV-25C5B/29C5B) | |
| C024 | 1-104-665-11 | ELECT 100MF | 20% 25V | C121 | 1-163-031-11 | CERAMIC CHIP 0.01MF 50V (KV-25C5B/29C5B) | |
| C025 | 1-126-960-11 | ELECT 1MF | 20% 50V | C122 | 1-104-665-11 | ELECT 100MF 20% 25V (KV-25C5B/29C5B) | |
| | | | | C129 | 1-126-963-11 | ELECT 4.7MF 20% 50V | |
| | | | | C133 | 1-162-638-11 | CERAMIC CHIP 1MF 16V (KV-25C5B/29C5B) | |
| | | | | C134 | 1-128-551-11 | ELECT 22MF 20% 25V | |

| REF. NO. | PART. NO | DESCRIPTION | REMARK | REF. NO. | PART. NO | DESCRIPTION | REMARK |
|----------|--------------|--|---------|----------|--------------|--|----------|
| C135 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C416 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| C137 | 1-163-017-91 | CERAMIC CHIP 0.0047MF | 10% 50V | C417 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V |
| C138 | 1-165-319-11 | CERAMIC CHIP 0.1MF | 50V | C418 | 1-126-960-11 | ELECT 1MF | 20% 50V |
| C139 | 1-163-031-11 | CERAMIC CHIP 0.01MF | 50V | C422 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C140 | 1-163-031-11 | CERAMIC CHIP 0.01MF | 50V | C423 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| C143 | 1-104-664-11 | ELECT 47MF | 20% 25V | C430 | 1-104-664-11 | ELECT 47MF | 20% 25V |
| C201 | 1-104-666-11 | ELECT 220MF | 20% 25V | C432 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V |
| C203 | 1-126-942-61 | ELECT 1000MF | 20% 25V | C433 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V |
| C204 | 1-126-942-61 | ELECT 1000MF | 20% 25V | C434 | 1-126-935-11 | ELECT 470MF | 20% 16V |
| C206 | 1-126-960-11 | ELECT 1MF | 20% 50V | C435 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C207 | 1-126-972-11 | ELECT 1000MF | 20% 50V | C436 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C208 | 1-126-960-11 | ELECT 1MF | 20% 50V | C437 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | |
| C215 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C438 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | |
| C301 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V | C443 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C302 | 1-126-967-11 | ELECT 47MF | 20% 16V | C444 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C303 | 1-101-004-00 | CERAMIC 0.01MF | 50V | C445 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C304 | 1-126-964-11 | ELECT 10MF | 20% 50V | C501 | 1-126-968-11 | ELECT 100MF | 20% 50V |
| C305 | 1-163-005-11 | CERAMIC CHIP 470PF | 10% 50V | C502 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C307 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | C503 | 1-126-968-11 | ELECT 100MF | 20% 50V |
| C308 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C504 | 1-106-220-00 | MYLAR 0.1MF | 10% 100V |
| C309 | 1-126-963-11 | ELECT 4.7MF | 20% 50V | C505 | 1-136-173-00 | FILM 0.47MF | 5% 50V |
| C312 | 1-163-099-00 | CERAMIC CHIP 18PF | 5% 50V | C506 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C313 | 1-163-099-00 | CERAMIC CHIP 18PF | 5% 50V | C507 | 1-126-933-11 | ELECT 100MF | 20% 16V |
| C314 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V | C508 | 1-126-960-11 | ELECT 1MF | 20% 50V |
| C316 | 1-163-259-91 | CERAMIC CHIP 220PF | 5% 50V | C509 | 1-137-047-11 | FILM 0.01MF | 10% 400V |
| C317 | 1-136-169-00 | FILM 0.22MF | 5% 50V | C510 | 1-163-133-00 | CERAMIC CHIP 470PF | 5% 50V |
| C319 | 1-126-964-11 | ELECT 10MF | 20% 50V | C512 | 1-162-114-00 | CERAMIC 0.0047MF | 2KV |
| C321 | 1-126-963-11 | ELECT 4.7MF | 20% 50V | C513 | 1-107-662-11 | ELECT 22MF | 20% 250V |
| C322 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V | C515 | 1-104-666-11 | ELECT 220MF | 20% 25V |
| C328 | 1-104-664-11 | ELECT 47MF | 20% 25V | C517 | 1-104-666-11 | ELECT 220MF | 20% 25V |
| C329 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | C518 | 1-106-375-12 | MYLAR 0.022MF | 99% 200V |
| C330 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V | C519 | 1-163-275-11 | CERAMIC CHIP 0.001MF | 5% 50V |
| C331 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | C520 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C332 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | C522 | 1-137-399-11 | FILM 0.1MF | 5% 50V |
| C333 | 1-126-960-91 | ELECT 1MF | 20% 50V | C531 | 1-126-964-11 | ELECT 10MF | 20% 50V |
| C334 | 1-163-017-91 | CERAMIC CHIP 4700PF | 10% 50V | C532 | 1-163-037-11 | CERAMIC CHIP 0.022MF | 10% 50V |
| C335 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | C533 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| C336 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | |
| C337 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | | | 29C5E/29C5K/29C5R) | |
| C338 | 1-126-967-11 | ELECT 47MF | 20% 50V | C535 | 1-163-251-11 | CERAMIC CHIP 100PF | 5% 50V |
| C339 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V | C536 | 1-115-522-11 | FILM 1MF | 5% 200V |
| C350 | 1-163-017-91 | CERAMIC CHIP 0.0047MF | 10% 50V | C537 | 1-137-417-11 | MYLAR 0.0047MF | 10% 200V |
| C351 | 1-163-017-91 | CERAMIC CHIP 0.0047MF | 10% 50V | C538 | 1-164-004-71 | CERAMIC CHIP 0.1MF | 10% 25V |
| C401 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V | C539 | 1-126-326-51 | ELECT 10MF | 20% 250V |
| C402 | 1-126-960-11 | ELECT 1MF | 20% 50V | | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | |
| C403 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V | | 1-111-230-11 | ELECT 1MF | 20% 100V |
| C405 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V | | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| C406 | 1-126-960-11 | ELECT 1MF | 20% 50V | C540 | 1-106-387-00 | MYLAR 0.068MF | 10% 400V |
| C407 | 1-126-964-11 | ELECT 10MF | 20% 50V | | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | |
| C408 | 1-126-964-11 | ELECT 10MF | 20% 50V | | 1-136-206-11 | FILM 0.033MF | 10% 400V |
| | | | | | | (KV-29C5A/29C5B/29C5D/29C5E/25C5K/29C5R) | |
| C410 | 1-126-964-11 | ELECT 10MF | 20% 50V | C541 | 1-106-383-00 | MYLAR 0.047MF | 10% 200V |
| C413 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V | C542 | 1-162-134-11 | CERAMIC 470PF | 10% 200V |
| C414 | 1-163-141-11 | CERAMIC CHIP 0.001MF | 5% 50V | C543 | 1-162-134-11 | CERAMIC 470PF | 10% 200V |
| | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | C544 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V |
| | 1-126-960-11 | ELECT 1MF | 20% 50V | C545 | 1-126-960-11 | ELECT 1MF | 20% 50V |
| | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | C546 | 1-130-895-00 | FILM 0.056MF | 5% 400V |
| C415 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V | | | | |

KV-25C5/29C5

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The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

| REF. NO. | PART.NO | DESCRIPTION | REMARK | REF. NO. | PART.NO | DESCRIPTION | REMARK |
|---------------|--------------|--|------------------|----------------|---------------|--|------------------|
| C547 | 1-117-813-11 | FILM 0.75MF | 5% 200V | SWF101 | 1-767-874-11 | FILTER, SURFACE WAVE | |
| C548 | 1-162-134-11 | CERAMIC 470PF | 10% 2KV | | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R/29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| C550 | 1-107-638-11 | ELECT 33MF | 20% 160V | | 1-579-273-11 | FILTER, SURFACE WAVE | (KV-25C5B/29C5B) |
| C552 | 1-102-212-00 | CERAMIC 820PF | 10% 500V | SWF102 | 1-767-873-11 | FILTER, SURFACE WAVE | |
| C553 | 1-137-417-11 | MYLAR 0.0047MF | 10% 200V | SWF103 | 1-760-722-11 | FILTER, SURFACE WAVE | (KV-25C5B/29C5B) |
| C555 | 1-117-650-11 | FILM 18000PF | 3% 1.2KV | < CONNECTOR > | | | |
| | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | CN001 | *1-564-508-11 | PLUG, CONNECTOR 5P | |
| | 1-117-648-11 | FILM 15000PF | 3% 1.2KV | CN007 | *1-564-510-11 | PLUG, CONNECTOR 7P | |
| | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | CN101 | 1-766-922-11 | CONNECTOR, BOARD TO BOARD 18P | |
| C571 | 1-123-024-21 | ELECT 33MF | 160V | CN201 | *1-564-507-11 | PLUG, CONNECTOR 4P | |
| C572 | 1-128-526-11 | ELECT 100MF | 20% 16V | CN208 | *1-564-508-11 | PLUG, CONNECTOR 5P | |
| C579 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | | CN406 | 1-564-511-11 | PLUG, CONNECTOR 8P | |
| | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | CN501 | *1-580-798-11 | CONNECTOR PIN (DY) 6P | |
| C580 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V | CN502 | 1-784-633-11 | PIN, CONNECTOR 4P | |
| C582 | 1-163-275-11 | CERAMIC CHIP 0.001MF | 5% 50V | CN503 | *1-564-507-11 | PLUG, CONNECTOR 4P | |
| C584 | 1-126-963-11 | ELECT 4.7MF | 20% 50V | | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| C601 Δ | 1-107-563-11 | FILM 0.1MF | 20% 300V | CN504 | *1-564-509-11 | PLUG, CONNECTOR 6P | |
| C602 Δ | 1-107-563-11 | FILM 0.1MF | 20% 300V | CN505 | *1-568-882-51 | PIN, CONNECTOR 7P | |
| C603 Δ | 1-117-700-51 | CERAMIC 0.0022MF | 99% 250V | | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| C604 Δ | 1-117-700-51 | CERAMIC 0.0022MF | 99% 250V | CN506 | 1-695-915-11 | TAB (CONTACT) | |
| C605 | 1-104-652-11 | ELECT 470MF | 20% 10V | CN509 | *1-508-784-00 | PIN, CONNECTOR (5MM PITCH) 1P | |
| C606 | 1-125-555-11 | ELECT (BLOCK) 330MF | 20% 400V | | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | |
| | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/29C5A/29C5B/29C5D/29C5E/29C5K) | | CN602 Δ | 1-508-765-00 | PIN, CONNECTOR (5MM PITCH) 3P | |
| | 1-117-752-11 | ELECT (BLOCK) 330MF | 20% 450V | CN603 Δ | 1-508-786-00 | PIN, CONNECTOR (5MM PITCH) 2P | |
| | | (KV-25C5R/29C5R) | | CN606 Δ | *1-691-291-11 | PIN, CONNECTOR (PC BOARD) 5P | |
| C607 | 1-125-787-51 | CERAMIC 680PF | 10% 2KV | < DIODE > | | | |
| C609 | 1-107-915-51 | ELECT 2200MF | 20% 50V | D001 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C610 | 1-104-665-11 | ELECT 100MF | 20% 25V | D002 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C611 | 1-165-127-11 | CERAMIC 470PF | 10% 500V | D004 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C612 Δ | 1-161-964-51 | CERAMIC 0.0047MF | 250V | D007 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C613 Δ | 1-161-964-51 | CERAMIC 0.0047MF | 250V | D008 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C614 Δ | 1-161-964-51 | CERAMIC 0.0047MF | 250V | D009 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C615 | 1-130-202-00 | FILM 0.022MF | 10% 400V | D010 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C618 | 1-107-890-11 | ELECT 2200MF | 20% 25V | D011 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C621 | 1-163-005-11 | CERAMIC CHIP 470PF | 10% 50V | D012 | 8-719-914-43 | DIODE DAN202K | |
| C622 Δ | 1-161-964-51 | CERAMIC 0.0047MF | 250V | D014 | 8-719-058-24 | DIODE RB501V-40TE-17 | |
| C624 | 1-104-665-11 | ELECT 100MF | 20% 25V | D015 | 8-719-914-43 | DIODE DAN202K | |
| C625 | 1-104-665-11 | ELECT 100MF | 20% 25V | D017 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C628 | 1-124-347-00 | ELECT 100MF | 20% 160V | D018 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C629 | 1-136-189-00 | FILM 0.1MF | 10% 250V | D023 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C630 | 1-165-127-11 | CERAMIC 470PF | 10% 500V | D101 | 8-719-982-24 | DIODE MT2J-33A | |
| C633 | 1-104-332-11 | CERAMIC 470PF | 10% 2KV | D104 | 8-719-914-43 | DIODE DAN202K | (KV-25C5B/29C5B) |
| C635 | 1-107-675-11 | ELECT 1MF | 20% 160V | D201 | 8-719-929-15 | DIODE HZS9.1NB2 | |
| C638 | 1-107-670-11 | ELECT 10MF | 20% 400V | D202 | 8-719-914-43 | DIODE DAN202K | |
| | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/29C5A/29C5B/29C5D/29C5E/29C5K) | | D204 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| | 1-107-679-91 | ELECT 10MF | 20% 450V | D205 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| | | (KV-25C5R/29C5R) | | D206 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C639 | 1-104-665-11 | ELECT 100MF | 20% 25V | D306 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C640 | 1-104-664-11 | ELECT 47MF | 20% 25V | D307 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| C641 | 1-104-665-11 | ELECT 100MF | 20% 25V | D308 | 8-719-109-72 | DIODE RD3.9ES-B2 | |
| C642 | 1-104-665-11 | ELECT 100MF | 20% 25V | D309 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C646 | 1-107-974-11 | CERAMIC 47PF | 5% 2KV | D320 | 8-719-929-15 | DIODE HZS9.1NB2 | |
| < FILTER > | | | | D402 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| CF101 | 1-404-134-00 | TRAP, CERAMIC (5.5MHZ) | | D405 | 8-719-109-97 | DIODE RD6.8ES-B2 | |
| CF105 | 1-760-154-11 | TRAP, CERAMIC | (KV-25C5B/29C5B) | | | | |

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| REF.NO. | PART.NO | DESCRIPTION | REMARK | REF.NO. | PART.NO | DESCRIPTION | REMARK |
|------------------|--------------|-----------------------|--------|------------|--------------|-----------------------|--|
| D406 | 8-719-109-97 | DIODE RD6.8ES-B2 | | < IC > | | | |
| D407 | 8-719-109-97 | DIODE RD6.8ES-B2 | | IC001 | 8-759-525-78 | IC SAA5497PS/M1A/040 | (KV-25C5A/25C5D/ 29C5A/29C5D) |
| D408 | 8-719-929-15 | DIODE HZS9.1NB2 | | | 8-759-526-01 | IC SAA5497PS/M1A/038 | (KV-25C5B/25C5E/25C5K/ 29C5B/29C5E/29C5K) |
| D409 | 8-719-109-97 | DIODE RD6.8ES-B2 | | | 8-759-525-77 | IC SAA5497PS/M1A/039 | (KV-25C5R/29C5R) |
| D410 | 8-719-109-89 | DIODE RD5.6ESB2 | | IC003 | 8-759-468-56 | IC MN1381T | |
| D414 | 8-719-109-97 | DIODE RD6.8ES-B2 | | IC004 | 8-759-432-33 | IC ST24W08FM6TR | |
| D415 | 8-719-929-15 | DIODE HZS9.1NB2 | | IC005 | 8-759-516-41 | IC CD4052BCM | |
| D417 | 8-719-929-15 | DIODE HZS9.1NB2 | | IC101 | 8-759-466-49 | IC TDA9817/V1 | (KV-25C5A/25C5D/25C5E/25C5K/ 25C5R/29C5A/29C5D/29C5E/ 29C5K/29C5R) |
| D418 | 8-719-929-15 | DIODE HZS9.1NB2 | | | 8-759-466-47 | IC TDA9818/V1 | (KV-25C5B/29C5B) |
| D419 | 8-719-929-15 | DIODE HZS9.1NB2 | | IC201 | 8-759-442-74 | IC TDA7495 | |
| D422 | 8-719-109-97 | DIODE RD6.8ES-B2 | | IC301 | 8-752-082-35 | IC CKA2060AS | |
| D423 | 8-719-109-97 | DIODE RD6.8ES-B2 | | IC501 | 8-759-192-71 | IC STV9379 | |
| D427 | 8-719-929-15 | DIODE HZS9.1NB2 | | IC531 | 8-759-450-95 | IC LM393N | |
| D501 | 8-719-302-43 | DIODE EL1Z | | IC603 | 8-749-920-61 | IC SE-135N | |
| D502 | 8-719-924-13 | DIODE MTZJ-T-77-22B | | IC604 | 8-759-524-82 | IC TYA7805CTV | |
| D511 | 8-719-028-72 | DIODE RGP02-17EL-6433 | | IC605 | 8-759-524-83 | IC TYA7809CTV | |
| D512 | 8-719-302-43 | DIODE EL1Z | | IC606 | 8-749-013-75 | IC STR-F6654 | |
| D513 | 8-719-979-85 | DIODE EGP20G | | IC608 | 8-759-524-82 | IC TYA7805CTV | |
| D514 | 8-719-979-85 | DIODE EGP20G | | IC609 | 8-759-468-89 | IC TOP209P | |
| D534 | 8-719-302-43 | DIODE EL1Z | | < SOCKET > | | | |
| D535 | 8-719-908-03 | DIODE GP08D | | J401 | 1-766-296-11 | CONNECTOR, DUAL SCART | |
| D536 | 8-719-945-80 | DIODE ERC06-15S | | J404 | 1-784-632-11 | JACK, PIN 2P | |
| D538 | 8-719-908-03 | DIODE GP08D | | < COIL > | | | |
| D539 | 8-719-900-26 | DIODE ERD29-08J | | L001 | 1-408-603-31 | INDUCTOR | 10UH |
| D541 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | | L102 | 1-408-599-21 | INDUCTOR | 4.7UH |
| D571 | 8-719-911-19 | DIODE 1SS119-25 | | L103 | 1-403-686-11 | COIL | |
| D573 | 8-719-921-40 | DIODE MTZJ-4.7C | | L104 | 1-410-671-31 | INDUCTOR | 47UH |
| D601 | 8-719-510-53 | DIODE D4SB60L | | L106 | 1-408-417-00 | INDUCTOR | 47UH |
| D602 | 8-719-046-74 | DIODE AU-01Z-V1 | | L108 | 1-410-985-11 | INDUCTOR CHIP | 0.22UH (KV-25C5B/29C5B) |
| D603 | 8-719-312-61 | DIODE EU-1Z | | L109 | 1-410-789-11 | INDUCTOR | 0.47UH (KV-25C5B/29C5B) |
| D605 | 8-719-312-10 | DIODE RU4AM-T3 | | L201 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | |
| D608 | 8-719-067-88 | DIODE RG1CLF-B1 | | L202 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | |
| D610 | 8-719-067-78 | DIODE RN3Z-LF014-302 | | L203 | 1-406-979-11 | INDUCTOR | 0UH |
| D613 | 8-719-911-19 | DIODE 1SS119-25 | | L302 | 1-408-417-31 | INDUCTOR | 47UH |
| D614 | 8-719-058-38 | DIODE FMN-G12S | | L303 | 1-408-609-41 | INDUCTOR | 33UH |
| D619 | 8-719-043-76 | DIODE AK04V0 | | L401 | 1-408-417-31 | INDUCTOR | 47UH |
| D621 | 8-719-068-00 | DIODE ERC04-06SE | | L402 | 1-408-417-31 | INDUCTOR | 47UH |
| D626 | 8-719-068-00 | DIODE ERC04-06SE | | L405 | 1-216-295-00 | SHORT | 0 |
| D627 | 8-719-510-26 | DIODE DINL20 | | L406 | 1-216-295-00 | SHORT | 0 |
| D628 | 8-719-059-23 | DIODE P6KE200AG23 | | L501 | 1-408-417-31 | INDUCTOR | 47UH |
| D629 | 8-719-979-64 | DIODE UF4005PKG23 | | L502 | 1-412-529-11 | INDUCTOR | 22UH |
| D631 | 8-719-110-31 | DIODE RD12ES-B2 | | L503 | 1-412-521-31 | INDUCTOR | 4.7UH |
| D632 | 8-719-510-64 | DIODE S2LA20F | | L532 | 1-412-552-11 | INDUCTOR | 2.2MMH |
| D633 | 8-719-109-89 | DIODE RD5.6ESB2 | | | 1-412-553-11 | INDUCTOR | 3.3MMH |
| < FERRITE BEAD > | | | | | | | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| FB001 | 1-412-911-11 | FERRITE | 0UH | | | | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| FB002 | 1-412-911-11 | FERRITE | 0UH | L533 | 1-406-989-21 | INDUCTOR | 0UH |
| FB601 | 1-412-911-11 | FERRITE | 0UH | L535 | 1-459-111-00 | INDUCTOR | 0UH |
| FB602 | 1-412-911-11 | FERRITE | 0UH | | | | |
| FB605 | 1-410-397-21 | FERRITE | 1.1UH | | | | |
| FB608 | 1-412-911-11 | FERRITE | 0UH | | | | |
| FB609 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | | | | | |
| FB610 | 1-410-397-21 | FERRITE | 1.1UH | | | | |
| FB611 | 1-410-397-21 | FERRITE | 1.1UH | | | | |
| FB612 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | | | | | |

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The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

| REF. NO. | PART. NO | DESCRIPTION | REMARK | REF. NO. | PART. NO | DESCRIPTION | REMARK |
|----------------|--------------|--|--------|----------|--------------|------------------|---|
| L537 | 1-406-214-11 | COIL, HORIZONTAL LINEARITY (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | JW220 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| | 1-409-855-11 | COIL, HORIZONTAL LINEARITY (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | R001 | 1-216-025-00 | RES,CHIP 100 5% | 1/10W |
| L540 | 1-535-465-11 | LEAD JUMPER (5.0MM) | | R002 | 1-216-025-00 | RES,CHIP 100 5% | 1/10W |
| L571 | 1-412-533-21 | INDUCTOR 470H | | R003 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| L602 | 1-408-417-00 | INDUCTOR 470H | | R004 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| | | < PHOTO COUPLER > | | R005 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| PH601 Δ | 8-749-010-64 | PHOTO COUPLER PC123F2 | | R007 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| | | < TRANSISTOR > | | R009 | 1-216-025-00 | RES,CHIP 100 5% | 1/10W |
| Q004 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | R010 | 1-216-025-00 | RES,CHIP 100 5% | 1/10W |
| Q005 | 1-801-806-11 | TRANSISTOR DTC144EKA | | R011 | 1-216-025-00 | RES,CHIP 100 5% | 1/10W |
| Q006 | 1-801-806-11 | TRANSISTOR DTC144EKA | | R012 | 1-247-807-31 | CARBON 100 5% | 1/4W |
| Q007 | 8-729-620-06 | TRANSISTOR 2SC3052-EF | | R013 | 1-216-214-00 | RES,CHIP 4.7K 5% | 1/8W |
| Q008 | 8-729-620-06 | TRANSISTOR 2SC3052-EF | | R014 | 1-216-057-00 | RES,CHIP 2.2K 5% | 1/10W |
| Q009 | 8-729-620-06 | TRANSISTOR 2SC3052-EF | | R015 | 1-216-049-00 | RES,CHIP 1K 5% | 1/10W |
| Q010 | 8-729-620-06 | TRANSISTOR 2SC3052-EF | | R016 | 1-216-073-00 | RES,CHIP 10K 5% | 1/10W |
| Q011 | 1-801-806-11 | TRANSISTOR DTC144EK | | R019 | 1-216-053-00 | RES,CHIP 1.5K 5% | 1/10W |
| Q012 | 8-729-620-06 | TRANSISTOR 2SC3052-EF | | R023 | 1-216-295-00 | SHORT 0 | |
| Q013 | 8-729-620-06 | TRANSISTOR 2SC3052-EF (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | R029 | 1-216-073-00 | RES,CHIP 10K 5% | 1/10W |
| Q014 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R030 | 1-216-081-00 | RES,CHIP 22K 5% | 1/10W |
| Q101 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | R032 | 1-216-089-00 | RES,CHIP 47K 5% | 1/10W |
| Q107 | 8-729-022-54 | TRANSISTOR 2SC3779C,D-AA (KV-25C5B/29C5B) | | R034 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| Q109 | 1-801-806-11 | TRANSISTOR DTC144EKA (KV-25C5B/29C5B) | | R035 | 1-216-049-00 | RES,CHIP 1K 5% | 1/10W |
| Q110 | 1-801-806-11 | TRANSISTOR DTC144EKA (KV-25C5B/29C5B) | | R036 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| Q111 | 8-729-216-22 | TRANSISTOR 2SA1162-G (KV-25C5B/29C5B) | | R038 | 1-216-073-00 | RES,CHIP 10K 5% | 1/10W |
| Q112 | 1-801-806-11 | TRANSISTOR DTC144EKA (KV-25C5B/29C5B) | | R039 | 1-216-089-00 | RES,CHIP 47K 5% | 1/10W |
| Q202 | 8-729-620-06 | TRANSISTOR 2SC3052-EF | | R050 | 1-216-041-00 | RES,CHIP 470 5% | 1/10W |
| Q401 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | R051 | 1-216-049-00 | RES,CHIP 1K 5% | 1/10W |
| Q405 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R053 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| Q408 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R054 | 1-216-041-00 | RES,CHIP 470 5% | 1/10W |
| Q501 | 8-729-620-06 | TRANSISTOR 2SC3052-EF | | R055 | 1-216-081-00 | RES,CHIP 22K 5% | 1/10W |
| Q532 | 8-729-038-83 | TRANSISTOR 2SK2251-01-F19 | | R056 | 1-216-105-00 | RES,CHIP 220K 5% | 1/10W |
| Q533 | 8-729-040-62 | TRANSISTOR 2SD2539 (LBSONY) | | R057 | 1-216-075-00 | RES,CHIP 12K 5% | 1/10W |
| Q535 | 8-729-119-80 | TRANSISTOR 2SC2688-LK | | R058 | 1-216-063-91 | RES,CHIP 3.9K 5% | 1/10W |
| Q571 | 8-729-105-08 | TRANSISTOR 2SA1330-06 | | R059 | 1-216-089-00 | RES,CHIP 47K 5% | 1/10W |
| Q574 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R060 | 1-216-174-00 | RES,CHIP 100 5% | 1/8W |
| Q575 | 1-801-806-11 | TRANSISTOR DTC144EKA | | R061 | 1-216-174-00 | RES,CHIP 100 5% | 1/8W |
| Q576 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R062 | 1-216-033-00 | RES,CHIP 220 5% | 1/10W |
| Q601 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | R063 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| | | < RESISTOR > | | R064 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W (KV-25C5B/29C5B) |
| JR012 | 1-216-295-00 | SHORT 0 (KV-25C5A/25C5D/25C5E/25C5K/25C5R/29C5A/29C5D/29C5E/29C5K/29C5R) | | R065 | 1-216-025-00 | RES,CHIP 100 5% | 1/10W |
| JR023 | 1-216-296-00 | SHORT 0 | | R066 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| JR031 | 1-216-295-00 | SHORT 0 | | R067 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W |
| JR033 | 1-216-296-00 | SHORT 0 | | R069 | 1-216-049-00 | RES,CHIP 1K 5% | 1/10W |
| JR403 | 1-216-073-00 | RES,CHIP 10K 5% | 1/10W | R070 | 1-216-081-00 | RES,CHIP 22K 5% | 1/10W |
| JR409 | 1-216-295-00 | SHORT 0 | | R071 | 1-216-214-00 | RES,CHIP 4.7K 5% | 1/8W |
| JR411 | 1-216-295-00 | SHORT 0 | | R072 | 1-216-097-00 | RES,CHIP 100K 5% | 1/10W |
| JR412 | 1-216-295-00 | SHORT 0 | | R073 | 1-216-097-00 | RES,CHIP 100K 5% | 1/10W |
| JR610 | 1-216-296-00 | SHORT 0 | | R075 | 1-216-069-00 | RES,CHIP 6.8K 5% | 1/10W |
| JR613 | 1-216-296-00 | SHORT 0 | | R077 | 1-216-083-00 | RES,CHIP 27K 5% | 1/10W |
| | | | | R078 | 1-216-065-00 | RES,CHIP 4.7K 5% | 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| | | | | R080 | 1-216-073-00 | RES,CHIP 10K 5% | 1/10W |
| | | | | R081 | 1-216-073-00 | RES,CHIP 10K 5% | 1/10W |

| REF. NO. | PART. NO | DESCRIPTION | REMARK | REF. NO. | PART. NO | DESCRIPTION | REMARK |
|----------|--------------|-------------|--|----------|--------------|-------------|-----------------------------------|
| R082 | 1-216-053-00 | RES,CHIP | 1.5K 5% 1/10W | R154 | 1-216-238-91 | RES,CHIP | 47K 5% 1/8W |
| R083 | 1-216-031-00 | RES,CHIP | 180 5% 1/10W | R155 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W |
| R084 | 1-216-053-00 | RES,CHIP | 1.5K 5% 1/10W | R156 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-25C5B/29C5B) |
| R085 | 1-216-031-00 | RES,CHIP | 180 5% 1/10W | R157 | 1-216-063-91 | RES,CHIP | 3.9K 5% 1/10W (KV-25C5B/29C5B) |
| R086 | 1-216-053-00 | RES,CHIP | 1.5K 5% 1/10W | R158 | 1-216-069-00 | RES,CHIP | 6.8K 5% 1/10W (KV-25C5B/29C5B) |
| R087 | 1-216-180-00 | RES,CHIP | 180 5% 1/8W | R204 | 1-247-863-91 | CARBON | 22K 5% 1/4W |
| R088 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | R206 | 1-216-085-00 | RES,CHIP | 33K 5% 1/10W |
| R089 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | R207 | 1-216-295-00 | SHORT | 0 |
| R090 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | R209 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W |
| R091 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | R211 | 1-215-873-00 | METAL OXIDE | 4.7K 5% 1W F |
| R092 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | R213 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W |
| R093 | 1-216-230-00 | RES,CHIP | 22K 5% 1/8W | R301 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R094 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W | R302 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W |
| R095 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W | R303 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W |
| R096 | 1-247-807-31 | CARBON | 100 5% 1/4W | R304 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W |
| R097 | 1-247-807-31 | CARBON | 100 5% 1/4W | R306 | 1-216-206-00 | RES,CHIP | 2.2K 5% 1/8W |
| R098 | 1-247-807-31 | CARBON | 100 5% 1/4W | R309 | 1-216-675-11 | METAL CHIP | 10K 0.50% 1/10W |
| R099 | 1-247-807-31 | CARBON | 100 5% 1/4W | R310 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W |
| R101 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W | R311 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W |
| R106 | 1-215-900-11 | METAL OXIDE | 22K 5% 2W F | R313 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R110 | 1-216-296-91 | SHORT | 0 (KV-25C5B/29C5B) | R314 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R111 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W (KV-25C5B/29C5B) | R315 | 1-216-075-91 | RES,CHIP | 12K 5% 1/10W |
| R112 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W (KV-25C5B/29C5B) | R316 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R116 | 1-249-437-11 | CARBON | 47K 5% 1/4W (KV-25C5E/25C5K/29C5E/29C5K) | R317 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W |
| R120 | 1-216-037-00 | RES,CHIP | 330 5% 1/10W | R318 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R121 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W | R319 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R122 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W | R320 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R127 | 1-216-031-00 | RES,CHIP | 180 5% 1/10W (KV-25C5B/29C5B) | R321 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R128 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W (KV-25C5B/29C5B) | R323 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R129 | 1-216-063-91 | RES,CHIP | 3.9K 5% 1/10W (KV-25C5B/29C5B) | R324 | 1-412-002-21 | INDUCTOR | 4.7UH 5% 1/10W |
| R133 | 1-216-295-00 | SHORT | 0 (KV-25C5A/25C5D/25C5E/25C5K/ 25C5R/29C5A/29C5D/29C5E/ 29C5K/29C5R) | R325 | 1-412-002-21 | INDUCTOR | 4.7UH 5% 1/10W |
| R142 | 1-216-295-00 | SHORT | 0 | R326 | 1-216-129-00 | RES,CHIP | 2.2M 5% 1/10W |
| R143 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W | R327 | 1-216-295-00 | SHORT | 0 |
| R144 | 1-216-079-00 | RES,CHIP | 18K 5% 1/10W | R331 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W |
| R145 | 1-216-212-00 | RES,CHIP | 3.9K 5% 1/8W | R332 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W |
| R147 | 1-216-017-91 | RES,CHIP | 47 5% 1/10W (KV-25C5B/29C5B) | R333 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W |
| R148 | 1-216-174-00 | RES,CHIP | 100 5% 1/8W (KV-25C5B/29C5B) | R334 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R149 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W (KV-25C5B/29C5B) | R335 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W |
| R151 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W | R337 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W |
| R152 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W (KV-25C5B/29C5B) | R338 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W |
| R153 | 1-216-180-00 | RES,CHIP | 180 5% 1/8W (KV-25C5B/29C5B) | R401 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W |
| | | | | R403 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W |
| | | | | R404 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W |
| | | | | R405 | 1-216-295-00 | SHORT | 0 |
| | | | | R406 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W |
| | | | | R408 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W |
| | | | | R409 | 1-216-029-71 | RES,CHIP | 150 5% 1/10W |
| | | | | R410 | 1-216-029-71 | RES,CHIP | 150 5% 1/10W |
| | | | | R411 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W |
| | | | | R412 | 1-216-029-71 | RES,CHIP | 150 5% 1/10W |
| | | | | R413 | 1-216-295-00 | SHORT | 0 |
| | | | | R414 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W |
| | | | | R415 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W |
| | | | | R417 | 1-260-158-11 | CARBON | 75 5% 1/2W |

KV-25C5/29C5

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| REF. NO. | PART.NO | DESCRIPTION | REMARK | REF. NO. | PART.NO | DESCRIPTION | REMARK |
|----------|--------------|-------------|---|----------|--------------|----------------------|---|
| R418 | 1-260-095-11 | CARBON | 470 5% 1/2W (KV-25C5A/25C5D/25C5E/25C5R/ 29C5A/29C5D/29C5E/29C5R) | R522 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W |
| | 1-247-823-31 | CARBON | 470 5% 1/4W (KV-25C5B/25C5K/29C5B/29C5K) | R523 | 1-216-117-00 | RES,CHIP | 680K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R419 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W | | 1-208-845-11 | RES,CHIP | 1M 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R420 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | R524 | 1-216-083-00 | RES,CHIP | 27K 5% 1/10W |
| R421 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W | R525 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W |
| R422 | 1-216-295-00 | SHORT | 0 | R526 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W |
| R425 | 1-216-077-00 | RES,CHIP | 15K 5% 1/10W | R527 | 1-216-077-00 | RES,CHIP | 15K 5% 1/10W |
| R426 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W | R528 | 1-216-246-00 | RES,CHIP | 100K 5% 1/8W |
| R427 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W | R529 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W |
| R429 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | R530 | 1-216-085-00 | RES,CHIP | 33K 5% 1/10W |
| R430 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W | R531 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W |
| R431 | 1-216-295-00 | SHORT | 0 | R532 | 1-216-063-91 | RES,CHIP | 3.9K 5% 1/10W |
| R432 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W | R533 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R435 | 1-216-022-00 | RES,CHIP | 75 5% 1/10W | | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R436 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | R534 | 1-216-107-00 | RES,CHIP | 270K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R439 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| | 1-216-041-00 | RES,CHIP | 470 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | R535 | 1-216-109-00 | RES,CHIP | 330K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R440 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W | | 1-216-101-00 | RES,CHIP | 150K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R441 | 1-216-295-00 | SHORT | 0 | R539 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W |
| R442 | 1-216-077-00 | RES,CHIP | 15K 5% 1/10W | R540 | 1-216-449-11 | METAL OXIDE | 56 5% 1W F (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R443 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W | | 1-215-861-00 | METAL OXIDE | 47 5% 1W F (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R450 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | R541 | 1-216-095-00 | RES,CHIP | 82K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R454 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R457 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W | R542 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W |
| R459 | 1-247-807-31 | CARBON | 100 5% 1/4W | R543 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W |
| R460 | 1-249-403-11 | CARBON | 68 5% 1/4W | R546 | 1-249-401-11 | CARBON | 47 5% 1/4W F (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R501 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | | 1-215-893-11 | METAL OXIDE | 1.5K 5% 2W F (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R502 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | R547 | 1-535-143-11 | LEAD, JUMPER (7.5MM) | |
| R503 | 1-215-888-00 | METAL OXIDE | 220 5% 2W F | | 1-215-893-11 | METAL OXIDE | 1.5K 5% 2W F (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R504 | 1-249-385-11 | CARBON | 2.2 5% 1/4W F | | 1-216-397-11 | METAL OXIDE | 4.7 5% 3W F (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R505 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | R548 | 1-216-397-11 | METAL OXIDE | 4.7 5% 3W F |
| R506 | 1-216-061-00 | RES,CHIP | 3.3K 5% 1/10W | R549 | 1-216-341-11 | METAL OXIDE | 0.22 5% 1W F |
| R507 | 1-216-349-00 | METAL OXIDE | 1 5% 1W F | R551 | 1-215-873-00 | METAL OXIDE | 4.7K 5% 1W F |
| R508 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | R552 | 1-216-061-00 | RES,CHIP | 3.3K 5% 1/10W |
| R509 | 1-216-061-00 | RES,CHIP | 3.3K 5% 1/10W | R553 | 1-249-381-11 | CARBON | 1 5% 1/4W F |
| R510 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | R571 | 1-249-417-11 | CARBON | 1K 5% 1/4W F |
| R511 | 1-215-869-11 | METAL OXIDE | 1K 5% 1W F | R572 | 1-216-369-00 | METAL OXIDE | 1 5% 2W F |
| R512 | 1-249-377-11 | CARBON | 0.47 5% 1/4W F | R573 | 1-216-101-00 | RES,CHIP | 150K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) |
| R513 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) |
| R514 | 1-249-377-11 | CARBON | 0.47 5% 1/4W F | R574 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W |
| R515 | 1-249-377-11 | CARBON | 0.47 5% 1/4W F | R575 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W |
| R516 | 1-249-493-11 | CARBON | 56K 5% 1/2W | | | | |
| R517 | 1-249-434-11 | CARBON | 27K 5% 1/4W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | | |
| | 1-249-429-11 | CARBON | 10K 5% 1/4W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | | | |
| R518 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | | | | |
| R520 | 1-215-884-11 | METAL OXIDE | 47 5% 2W F | | | | |
| R521 | 1-216-117-00 | RES,CHIP | 680K 5% 1/10W (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | | |
| | 1-208-845-11 | RES,CHIP | 1M 5% 1/10W (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | | | |

The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

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| REF. NO. | PART.NO | DESCRIPTION | REMARK | REF. NO. | PART.NO | DESCRIPTION | REMARK |
|-----------------------|--------------|--|--|---|---------------|---------------------|--|
| R576 | 1-408-599-21 | INDUCTOR | 4.7UH 5% 1/4W | < THERMISTOR > | | | |
| R581 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W | TBP601 Δ 1-810-961-11 THERMISTOR, POSITIVE | | | |
| R582 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W | < TUNER > | | | |
| R583 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | TU101 | 8-598-361-01 | TUNER (BTP-AC402) | (KV-25C5A/25C5D/25C5R/ 29C5A/29C5D/29C5R) |
| R588 | 1-216-053-00 | RES,CHIP | 1.5K 5% 1/10W | | 1-693-418-11 | TUNER (TELE9-001A) | (KV-25C5B/29C5B) |
| R589 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | | 8-598-432-00 | TUNER (BTP-AC411) | (KV-25C5E/25C5K/ 29C5E/29C5K) |
| R590 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | < CRYSTAL > | | | |
| R591 | 1-215-892-11 | METAL OXIDE | 1K 5% 2W F | X001 | 1-578-774-11 | VIBRATOR, CRYSTAL | |
| R593 | 1-249-439-11 | CARBON | 68K 5% 1/4W | X302 | 1-567-505-11 | OSCILLATOR, CRYSTAL | |
| R594 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W | X303 | 1-567-504-11 | OSCILLATOR, CRYSTAL | |
| R602 | 1-202-961-11 | CEMENTED | 1.8 5% 10W | ***** | | | |
| R603 | 1-202-933-61 | FUSIBLE | 0.1 10% 1/2W F | *A-1638-111-A C BOARD, COMPLETE | | | |
| R607 Δ | 1-202-961-11 | CEMENTED | 1.8 5% 10W | ***** | | | |
| R608 | 1-215-927-00 | METAL OXIDE | 47K 5% 3W F | < CAPACITOR > | | | |
| R611 | 1-249-415-11 | CARBON | 680 5% 1/4W | C701 | 1-102-114-00 | CERAMIC | 470PF 10% 50V |
| R613 Δ | 1-240-030-91 | METAL | 4.7M 5% 1/2W | C702 | 1-102-115-00 | CERAMIC | 560PF 10% 50V |
| R614 Δ | 1-240-030-91 | METAL | 4.7M 5% 1/2W | C703 | 1-102-116-00 | CERAMIC | 680PF 10% 50V |
| R615 | 1-249-422-11 | CARBON | 2.7K 5% 1/4W | C708 | 1-162-114-00 | CERAMIC | 0.0047MF 2KV |
| R616 | 1-216-393-00 | METAL OXIDE | 2.2 5% 3W F | C710 | 1-107-652-11 | ELECT | 10MF 20% 250V |
| R617 | 1-249-405-11 | CARBON | 100 5% 1/4W F | C711 | 1-102-114-00 | CERAMIC | 470PF 10% 50V |
| R619 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | C712 | 1-102-116-00 | CERAMIC | 680PF 10% 50V |
| R622 | 1-249-401-11 | CARBON | 47 5% 1/4W | C714 | 1-126-967-11 | ELECT | 47MF 20% 16V |
| R627 | 1-249-389-11 | CARBON | 4.7 5% 1/4W F | C717 | 1-102-114-00 | CERAMIC | 470PF 10% 50V |
| R628 | 1-247-791-91 | CARBON | 22 5% 1/4W | C718 | 1-102-114-00 | CERAMIC | 470PF 10% 50V |
| R652 | 1-216-393-00 | METAL OXIDE | 2.2 5% 3W F | C719 | 1-102-114-00 | CERAMIC | 470PF 10% 50V |
| R653 | 1-216-393-00 | METAL OXIDE | 2.2 5% 3W F | C722 | 1-101-880-00 | CERAMIC | 47PF 5% 50V |
| R658 | 1-215-929-11 | METAL OXIDE | 100K 5% 3W F | C723 | 1-101-880-00 | CERAMIC | 47PF 5% 50V |
| R659 | 1-216-383-21 | METAL OXIDE | 0.33 5% 3W F | C724 | 1-101-880-00 | CERAMIC | 47PF 5% 50V |
| R660 | 1-216-384-21 | METAL OXIDE | 0.39 5% 3W F | < CONNECTOR > | | | |
| R661 | 1-247-843-11 | CARBON | 3.3K 5% 1/4W | CN701 | 1-784-633-11 | PIN, CONNECTOR 4P | |
| R662 | 1-215-929-11 | METAL OXIDE | 100K 5% 3W F | CN702 | 1-695-915-11 | TAB (CONTACT) | |
| R664 | 1-249-417-11 | CARBON | 1K 5% 1/4W | CN703 | *1-564-509-11 | PLUG, CONNECTOR 6P | |
| R665 | 1-215-877-11 | METAL OXIDE | 22K 5% 1W F | < DIODE > | | | |
| R667 | 1-215-927-00 | METAL OXIDE | 47K 5% 3W F | D702 | 8-719-991-33 | DIODE 1SS133T-77 | |
| < VARIABLE RESISTOR > | | | | D703 | 1-719-991-33 | DIODE 1SS133T-77 | |
| RV101 | 1-241-765-11 | RES, ADJ, CARBON 22K | (KV-25C5B/29C5B) | D704 | 1-719-991-33 | DIODE 1SS133T-77 | |
| < RELAY > | | | | D705 | 1-719-991-33 | DIODE 1SS133T-77 | |
| RY601 Δ | 1-755-245-11 | RELAY, AC POWER | | D706 | 8-719-991-33 | DIODE 1SS133T-77 | |
| < SWITCH > | | | | D707 | 8-719-991-33 | DIODE 1SS133T-77 | |
| SW532 | 1-572-707-11 | SWITCH, LEVER | | D708 | 8-719-991-33 | DIODE 1SS133T-77 | |
| < TRANSFORMER > | | | | D709 | 8-719-991-33 | DIODE 1SS133T-77 | |
| T511 Δ | 1-453-264-11 | TRANSFORMER ASSY, FLYBACK (NK-1680/U2B4) | (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | D710 | 8-719-991-33 | DIODE 1SS133T-77 | |
| | 1-453-265-11 | TRANSFORMER ASSY, FLYBACK (NK-1681/U2B4) | (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | D711 | 1-216-349-51 | RESISTOR METAL 1 | 5% 1W |
| T531 | 1-437-195-11 | TRANSFORMER, HORIZONTAL DRIVE | | D714 | 8-719-991-33 | DIODE 1SS133T-77 | |
| T532 | 1-431-228-11 | TRANSFORMER, POWER MODULATION | | D715 | 8-719-991-33 | DIODE 1SS133T-77 | |
| T601 Δ | 1-427-962-11 | TRANSFORMER, LINE FILTER | | D716 | 8-719-991-33 | DIODE 1SS133T-77 | |
| T602 | 1-431-732-11 | TRANSFORMER, CONVERTER (SRT) | | D717 | 8-719-991-33 | DIODE 1SS133T-77 | |
| T603 Δ | 1-431-777-11 | TRANSFORMER, CONVERTER | | D718 | 8-719-991-33 | DIODE 1SS133T-77 | |

C

VM

The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

| REF. NO. | PART.NO | DESCRIPTION | REMARK | REF. NO. | PART.NO | DESCRIPTION | REMARK |
|----------------|-----------------------|--------------------------|--------|---|--------------|------------------------------|--------|
| D719 | 8-719-991-33 | DIODE 1SS133T-77 | | R746 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| < CRT SOCKET > | | | | < VARIABLE RESISTOR > | | | |
| J701 | Δ 1-526-990-21 | SOCKET, CRT | | RV701 | 1-230-641-11 | RES, ADJ, METAL GLAZE 2.2M | |
| < COIL > | | | | RV702 | 1-241-656-21 | RES, ADJ, METAL FILM 110M | |
| L704 | 1-408-609-41 | INDUCTOR 33UH | | ***** | | | |
| < TRANSISTOR > | | | | *A-1644-088-A VM BOARD, COMPLETE (KV-29C5 ONLY) | | | |
| Q702 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | ***** | | | |
| Q703 | 8-729-906-70 | TRANSISTOR BF871-127 | | 4-382-854-11 SCREW (M3X10), P, 5W (+) | | | |
| Q704 | 8-729-200-17 | TRANSISTOR BF421L-AMMO | | < CAPACITOR > | | | |
| Q705 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | C1701 | 1-126-933-11 | ELECT 100MF 20% 16V | |
| Q706 | 8-729-906-70 | TRANSISTOR BF871-127 | | C1702 | 1-128-551-11 | ELECT 22MF 20% 25V | |
| Q707 | 8-729-200-17 | TRANSISTOR BF421L-AMMO | | C1703 | 1-126-933-11 | ELECT 100MF 20% 16V | |
| Q708 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | C1704 | 1-107-357-11 | FILM 0.47MF 5% 100V | |
| Q709 | 8-729-906-70 | TRANSISTOR BF871-127 | | C1705 | 1-107-638-11 | ELECT 33MF 20% 160V | |
| Q710 | 8-729-200-17 | TRANSISTOR BF421L-AMMO | | C1706 | 1-104-999-11 | FILM 0.1MF 5% 200V | |
| < RESISTOR > | | | | C1707 | 1-136-207-11 | FILM 0.047MF 10% 250V | |
| R701 | 1-247-895-91 | CARBON 470K 5% 1/4W | | C1708 | 1-137-364-11 | FILM 0.001MF 5% 50V | |
| R704 | 1-216-486-00 | METAL OXIDE 8.2K 5% 3W F | | C1709 | 1-137-364-11 | FILM 0.001MF 5% 50V | |
| R705 | 1-260-103-11 | CARBON 2.2K 5% 1/2W | | C1710 | 1-163-009-11 | CERAMIC CHIP 0.001MF 10% 50V | |
| R706 | 1-247-815-91 | CARBON 220 5% 1/4W | | C1720 | 1-107-667-11 | ELECT 2.2MF 20% 160V | |
| R707 | 1-247-815-91 | CARBON 220 5% 1/4W | | C1721 | 1-136-207-11 | FILM 0.047MF 10% 250V | |
| R708 | 1-247-791-91 | CARBON 22 5% 1/4W | | C1722 | 1-126-934-11 | ELECT 220MF 20% 16V | |
| R709 | 1-202-844-00 | SOLID 330K 10% 1/2W | | C1723 | 1-161-830-00 | CERAMIC 0.0047MF 500V | |
| R711 | 1-247-843-11 | CARBON 3.3K 5% 1/4W | | C1726 | 1-126-934-11 | ELECT 220MF 20% 16V | |
| R712 | 1-260-103-11 | CARBON 2.2K 5% 1/2W | | C1803 | 1-163-037-11 | CERAMIC CHIP 0.022MF 10% 50V | |
| R713 | 1-247-875-91 | CARBON 68K 5% 1/4W | | C1804 | 1-126-964-11 | ELECT 10MF 20% 50V | |
| R714 | 1-216-486-00 | METAL OXIDE 8.2K 5% 3W F | | C1805 | 1-137-366-11 | FILM 0.0022MF 5% 50V | |
| R715 | 1-249-417-11 | CARBON 1K 5% 1/4W | | C1841 | 1-163-023-00 | CERAMIC CHIP 0.015MF 10% 50V | |
| R716 | 1-247-815-91 | CARBON 220 5% 1/4W | | C1844 | 1-130-959-00 | FILM 0.047MF 10% 400V | |
| R717 | 1-247-815-91 | CARBON 220 5% 1/4W | | C1845 | 1-136-175-00 | FILM 0.68MF 5% 50V | |
| R718 | 1-202-814-11 | SOLID 33K 10% 1/2W | | C1901 | 1-163-251-11 | CERAMIC CHIP 100PF 5% 50V | |
| R719 | 1-247-791-91 | CARBON 22 5% 1/4W | | C1902 | 1-137-374-11 | FILM 0.047MF 5% 50V | |
| R720 | 1-247-843-11 | CARBON 3.3K 5% 1/4W | | C1903 | 1-126-964-11 | ELECT 10MF 20% 50V | |
| R722 | 1-202-848-00 | SOLID 680K 10% 1/2W | | C1904 | 1-137-366-11 | FILM 0.0022MF 5% 50V | |
| R723 | 1-249-417-11 | CARBON 1K 5% 1/4W | | C1905 | 1-137-374-11 | FILM 0.047MF 5% 50V | |
| R724 | 1-260-131-11 | CARBON 470K 5% 1/2W | | C1906 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| R726 | 1-260-103-11 | CARBON 2.2K 5% 1/2W | | C1911 | 1-136-189-00 | FILM 0.1MF 10% 250V | |
| R727 | 1-247-815-91 | CARBON 220 5% 1/4W | | C1912 | 1-129-702-00 | FILM 0.001MF 5% 630V | |
| R728 | 1-216-351-00 | METAL OXIDE 1.5 5% 1W F | | C1913 | 1-136-558-11 | FILM 0.0039MF 5% 630V | |
| R729 | 1-247-815-91 | CARBON 220 5% 1/4W | | C1914 | 1-102-157-00 | CERAMIC 560PF 10% 500V | |
| R730 | 1-247-791-91 | CARBON 22 5% 1/4W | | C1915 | 1-137-102-11 | FILM 0.022MF 10% 250V | |
| R731 | 1-247-843-11 | CARBON 3.3K 5% 1/4W | | C1951 | 1-126-964-11 | ELECT 10MF 20% 50V | |
| R733 | 1-247-823-91 | CARBON 470 5% 1/4W | | C1952 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| R734 | 1-247-807-31 | CARBON 100 5% 1/4W | | C1953 | 1-136-165-00 | FILM 0.1MF 5% 50V | |
| R735 | 1-247-823-91 | CARBON 470 5% 1/4W | | C1954 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| R736 | 1-216-486-00 | METAL OXIDE 8.2K 5% 3W F | | C1955 | 1-136-165-00 | FILM 0.1MF 5% 50V | |
| R737 | 1-214-891-91 | CARBON 330K 5% 1/4W | | C1956 | 1-126-964-11 | ELECT 10MF 20% 50V | |
| R739 | 1-249-417-11 | CARBON 1K 5% 1/4W | | C1957 | 1-126-964-11 | ELECT 10MF 20% 50V | |
| R740 | 1-247-823-11 | CARBON 470 5% 1/4W | | C1958 | 1-136-173-00 | FILM 0.47MF 5% 50V | |
| R741 | 1-202-549-00 | SOLID 100 20% 1/2W | | C1959 | 1-107-714-11 | ELECT 10MF 20% 50V | |
| R744 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | | C1960 | 1-107-636-11 | ELECT 10MF 20% 160V | |
| R745 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | | | | | |

VM

REF.NO. PART.NO DESCRIPTION REMARK

< CONNECTOR >

CN1705 *1-564-510-11 PLUG, CONNECTOR 7P
 CN1718 1-774-418-11 CONNECTOR, BOARD TO BOARD 8P
 CN1801 *1-564-506-11 PLUG, CONNECTOR 3P
 CN1803 *1-564-507-11 PLUG, CONNECTOR 4P
 CN1809 *1-508-784-12 PIN, CONNECTOR (5MM PITCH) 1P

< DIODE >

D1701 8-719-991-33 DIODE 1SS133T-77
 D1702 8-719-110-88 DIODE RD39ES-B2
 D1703 8-719-110-88 DIODE RD39ES-B2
 D1801 8-719-110-17 DIODE RD10ESB2
 D1802 8-719-110-17 DIODE RD10ESB2
 D1803 8-719-110-17 DIODE RD10ESB2
 D1840 8-719-302-43 DIODE EL1Z
 D1841 8-719-991-33 DIODE 1SS133T-77
 D1901 8-719-991-33 DIODE 1SS133T-77
 D1902 8-719-991-33 DIODE 1SS133T-77
 D1903 8-719-991-33 DIODE 1SS133T-77
 D1904 8-719-991-33 DIODE 1SS133T-77
 D1905 8-719-923-60 DIODE MTZJ-T-77-9.1A
 D1906 8-719-970-87 DIODE ERA38-06
 D1907 8-719-970-87 DIODE ERA38-06
 D1908 8-719-300-33 DIODE RU-3AM
 D1909 8-719-991-33 DIODE 1SS133T-77
 D1910 8-719-991-33 DIODE 1SS133T-77

< IC >

IC1801 8-759-603-37 IC M5216P
 IC1901 8-759-450-95 IC LM393N
 IC1902 8-759-008-70 IC LM358N

< COIL >

L1701 1-408-603-31 INDUCTOR 10UH
 L1702 1-408-597-31 INDUCTOR 3.3UH
 L1703 1-408-603-31 INDUCTOR 10UH
 L1704 1-249-422-11 CARBON 2.7K 5% 1/4W
 L1841 1-406-674-11 INDUCTOR 0UH
 L1843 1-406-989-21 INDUCTOR 0UH
 L1901 1-406-677-11 INDUCTOR 0UH

< TRANSISTOR >

Q1701 8-729-120-28 TRANSISTOR 2SC1623-L5L6
 Q1702 8-729-120-28 TRANSISTOR 2SC1623-L5L6
 Q1703 8-729-017-05 TRANSISTOR 2SA1837
 Q1704 8-729-119-78 TRANSISTOR 2SC2785-HFE
 Q1706 8-729-017-06 TRANSISTOR 2SC4793
 Q1708 8-729-216-22 TRANSISTOR 2SA1162-G
 Q1709 8-729-120-28 TRANSISTOR 2SC1623-L5L6
 Q1710 8-729-620-06 TRANSISTOR 2SC3052-EF
 Q1840 8-729-120-28 TRANSISTOR 2SC1623-L5L6
 Q1841 8-729-017-06 TRANSISTOR 2SC4793
 Q1901 8-729-620-06 TRANSISTOR 2SC3052-EF
 Q1902 8-729-620-06 TRANSISTOR 2SC3052-EF
 Q1903 8-729-043-95 TRANSISTOR 2SC3840K(3)
 Q1904 8-729-620-06 TRANSISTOR 2SC3052-EF
 Q1905 8-729-620-06 TRANSISTOR 2SC3052-EF

REF.NO. PART.NO DESCRIPTION REMARK

Q1906 8-729-119-80 TRANSISTOR 2SC2688-LK
 Q1907 8-729-119-80 TRANSISTOR 2SC2688-LK

< RESISTOR >

R1701 1-216-049-00 RES,CHIP 1K 5% 1/10W
 R1702 1-216-049-00 RES,CHIP 1K 5% 1/10W
 R1703 1-216-057-00 RES,CHIP 2.2K 5% 1/10W
 R1704 1-216-045-00 RES,CHIP 680 5% 1/10W
 R1705 1-247-815-91 CARBON 220 5% 1/4W
 R1706 1-247-815-91 CARBON 220 5% 1/4W
 R1708 1-216-035-00 RES,CHIP 270 5% 1/10W
 R1712 1-260-311-11 CARBON 39 5% 1/2W
 R1713 1-249-384-11 CARBON 1.8 5% 1/4W F
 R1714 1-249-414-11 CARBON 560 5% 1/4W F
 R1715 1-249-432-11 CARBON 18K 5% 1/4W
 R1716 1-249-417-11 CARBON 1K 5% 1/4W F
 R1717 1-215-913-11 METAL OXIDE 220 5% 3W F
 R1718 1-249-432-11 CARBON 18K 5% 1/4W
 R1719 1-249-384-11 CARBON 1.8 5% 1/4W F
 R1720 1-249-400-11 CARBON 39 5% 1/4W F
 R1721 1-249-414-11 CARBON 560 5% 1/4W
 R1722 1-216-017-00 RES,CHIP 47 5% 1/10W
 R1724 1-216-017-00 RES,CHIP 47 5% 1/10W
 R1725 1-215-887-00 METAL OXIDE 150 5% 2W F
 R1728 1-216-037-00 RES,CHIP 330 5% 1/10W
 R1729 1-216-041-00 RES,CHIP 470 5% 1/10W
 R1731 1-249-411-11 CARBON 330 5% 1/4W
 R1751 1-216-049-00 RES,CHIP 1K 5% 1/10W
 R1752 1-216-049-00 RES,CHIP 1K 5% 1/10W
 R1753 1-216-049-00 RES,CHIP 1K 5% 1/10W
 R1805 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1806 1-216-117-00 RES,CHIP 680K 5% 1/10W
 R1807 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1808 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1809 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1810 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1841 1-216-097-00 RES,CHIP 100K 5% 1/10W
 R1842 1-216-057-00 RES,CHIP 2.2K 5% 1/10W
 R1843 1-260-111-11 CARBON 10K 5% 1/2W
 R1844 1-216-061-00 RES,CHIP 3.3K 5% 1/10W
 R1846 1-260-111-11 CARBON 10K 5% 1/2W
 R1847 1-215-886-11 METAL OXIDE 100 5% 2W F
 R1848 1-215-875-11 METAL OXIDE 10K 5% 1W F
 R1901 1-249-441-11 CARBON 100K 5% 1/4W
 R1902 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1903 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1904 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1905 1-216-097-00 RES,CHIP 100K 5% 1/10W
 R1906 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1907 1-216-097-00 RES,CHIP 100K 5% 1/10W
 R1908 1-216-033-00 RES,CHIP 220 5% 1/10W
 R1909 1-215-493-00 METAL 1M 1% 1/4W
 R1910 1-216-295-00 SHORT 0
 R1911 1-216-073-00 RES,CHIP 10K 5% 1/10W
 R1912 1-208-845-11 RES,CHIP 1M 5% 1/10W
 R1913 1-216-049-00 RES,CHIP 1K 5% 1/10W
 R1914 1-216-057-00 RES,CHIP 2.2K 5% 1/10W

VM

H1

S1

The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

| REF.NO. | PART.NO | DESCRIPTION | REMARK | REF.NO. | PART.NO | DESCRIPTION | REMARK |
|----------------------------------|------------------------|------------------------------|-----------------|--|--------------------|-----------------------------|--------|
| R1915 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W | D902 | 8-719-929-15 | DIODE HZS9.1NB2 | |
| R1916 | 1-216-675-11 | METAL CHIP | 10K 0.50% 1/10W | D903 | 8-719-929-15 | DIODE HZS9.1NB2 | |
| R1917 | 1-216-687-11 | METAL CHIP | 33K 0.50% 1/10W | D904 | 8-719-109-97 | DIODE RD6.8ES-B2 | |
| R1921 | 1-215-896-51 | METAL OXIDE | 4.7K 5% 2W F | D905 | 8-719-109-97 | DIODE RD6.8ES-B2 | |
| R1922 | 1-215-878-00 | METAL OXIDE | 33K 5% 1W F | D906 | 8-719-923-60 | DIODE MTZJ-T-77-9.1A | |
| R1923 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | D907 | 8-719-923-60 | DIODE MTZJ-T-77-9.1A | |
| R1924 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | D908 | 8-719-923-60 | DIODE MTZJ-T-77-9.1A | |
| R1925 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | < FUSE > | | | |
| R1951 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W | F601 Δ 1-576-231-21 FUSE (H.B.C.) 4AMP 250V | | | |
| R1952 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | *1-533-725-11 HOLDER, FUSE (F601) | | | |
| R1953 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | < IC > | | | |
| R1954 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | IC900 | 8-742-014-11 | HYB IC SBX1981-51 | |
| R1955 | 1-216-089-00 | RES,CHIP | 47K 5% 1/10W | < SOCKET > | | | |
| R1956 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W | J900 | 1-764-606-11 | JACK | |
| R1957 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W | < COIL > | | | |
| R1958 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | L900 | 1-412-533-21 | INDUCTOR 47UH | |
| R1959 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W | L901 | 1-412-533-21 | INDUCTOR 47UH | |
| R1960 | 1-216-113-00 | RES,CHIP | 470K 5% 1/10W | L902 | 1-408-603-31 | INDUCTOR 10UH | |
| R1961 | 1-216-097-00 | RES,CHIP | 100K 5% 1/10W | L903 | 1-408-603-31 | INDUCTOR 10UH | |
| R1962 | 1-216-101-00 | RES,CHIP | 150K 5% 1/10W | < RESISTOR > | | | |
| R1963 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | R900 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1964 | 1-216-057-00 | RES,CHIP | 2.2K 5% 1/10W | R901 | 1-249-426-11 | CARBON 5.6K 5% 1/4W | |
| R1965 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | R902 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R1966 | 1-216-081-00 | RES,CHIP | 22K 5% 1/10W | R903 | 1-260-091-11 | CARBON 220 5% 1/2W | |
| R1967 | 1-215-876-00 | METAL OXIDE | 15K 5% 1W F | R904 | 1-260-091-11 | CARBON 220 5% 1/2W | |
| R1968 | 1-249-416-11 | CARBON | 820 5% 1/4W | R908 | 1-249-401-11 | CARBON 47 5% 1/4W | |
| R1969 | 1-215-870-11 | METAL OXIDE | 1.5K 5% 1W F | R909 | 1-247-895-91 | CARBON 470K 5% 1/4W | |
| < TRANSFORMER > | | | | R910 | 1-247-895-91 | CARBON 470K 5% 1/4W | |
| T1901 | 1-424-584-11 | TRANSFORMER, DYNAMIC FOCUS | | R911 | 1-535-465-11 | LEAD, JUMPER (5.0MM) | |
| ***** | | | | R912 | 1-249-422-11 | CARBON 2.7K 5% 1/4W | |
| *A-1646-161-A H1 BOARD, COMPLETE | | | | R913 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| ***** | | | | R914 | 1-247-863-91 | CARBON 22K 5% 1/4W | |
| < CAPACITOR > | | | | < SWITCH > | | | |
| C902 | 1-137-372-11 | FILM | 0.022MF 5% 50V | S601 Δ 1-571-433-21 SWITCH, PUSH (AC POWER) | | | |
| C903 | 1-137-372-11 | FILM | 0.022MF 5% 50V | S900 | 1-692-979-21 | SWITCH, TACTILE | |
| C904 | 1-104-665-11 | ELECT | 100MF 20% 25V | S901 | 1-692-979-21 | SWITCH, TACTILE | |
| C905 | 1-126-964-11 | ELECT | 10MF 20% 50V | S902 | 1-692-979-21 | SWITCH, TACTILE | |
| C907 | 1-126-960-11 | ELECT | 1MF 20% 50V | ***** | | | |
| C908 | 1-126-960-11 | ELECT | 1MF 20% 50V | *A-1652-053-A | S1 BOARD, COMPLETE | (KV-25C5/ 25C5D/25C5R/ | |
| C911 | 1-102-074-00 | CERAMIC | 0.001MF 10% 50V | ***** | | | |
| C912 | 1-102-074-00 | CERAMIC | 0.001MF 10% 50V | *A-1652-056-A | S1 BOARD, COMPLETE | 29C5/ 29C5D/29C5R) | |
| < CONNECTOR > | | | | ***** | | | |
| CN603 | Δ *1-580-844-11 | PIN, CONNECTOR (POWER) | | *A-1652-052-A | S1 BOARD, COMPLETE | (K- 25C5E/25C5K/ | |
| CN604 | Δ *1-691-291-11 | PIN, CONNECTOR (PC BOARD) 5P | | ***** | | | |
| CN900 | 1-779-947-11 | TERMINAL BLOCKS | | < CAPACITOR > | | | |
| CN906 | *1-564-511-11 | PLUG, CONNECTOR 8P | | C1103 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| CN907 | *1-564-510-11 | PLUG, CONNECTOR 7P | | C1106 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| CN908 | *1-564-508-11 | PLUG, CONNECTOR 5P | | C1107 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| < DIODE > | | | | C1108 | 1-164-232-11 | CERAMIC CHIP 0.01MF 10% 50V | |
| D901 | 8-719-302-45 | DIODE SEL1210S-CD | | | | | |
| | *4-203-258-01 | HOLDER, LED (D901) | | | | | |

KV-25C5/29C5

S1

| REF.NO. | PART.NO | DESCRIPTION | REMARK | REF.NO. | PART.NO | DESCRIPTION | REMARK |
|---------|--------------|-------------|---|-------------|--------------|-------------------|--------------|
| R1118 | 1-216-682-11 | METAL CHIP | 20K 0.50% 1/10W (KV-25C5B/25C5E/25C5K/ 29C5B/29C5E/29C5K) | R1174 | 1-216-085-00 | RES,CHIP | 33K 5% 1/10W |
| R1121 | 1-216-065-00 | RES,CHIP | 4/7K 5% 1/10W (KV-25C5A/25C5D/25C5R/ 29C5A/29C5D/29C5R) | R1175 | 1-216-085-00 | RES,CHIP | 33K 5% 1/10W |
| | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-25C5B/25C5E/25C5K/ 29C5B/29C5E/29C5K) | R1176 | 1-216-085-00 | RES,CHIP | 33K 5% 1/10W |
| R1122 | 1-216-065-00 | RES,CHIP | 4.7K 5% 1/10W (KV-25C5A/25C5D/25C5R/ 29C5A/29C5D/29C5R) | R1177 | 1-216-085-00 | RES,CHIP | 33K 5% 1/10W |
| | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-25C5B/25C5E/25C5K/ 29C5B/29C5E/29C5K) | R1178 | 1-216-073-71 | RES,CHIP | 10K 5% 1/10W |
| R1123 | 1-216-065-71 | RES,CHIP | 4.7K 5% 1/10W | < CRYSTAL > | | | |
| R1124 | 1-216-073-71 | RES,CHIP | 10K 5% 1/10W | X1101 | 1-767-813-21 | VIBRATOR, CRYSTAL | |
| R1125 | 1-216-065-71 | RES,CHIP | 4.7K 5% 1/10W | ***** | | | |
| R1126 | 1-216-073-71 | RES,CHIP | 10K 5% 1/10W | | | | |
| R1130 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-25C5A/25C5D/25C5R/ 29C5A/29C5D/29C5R) | | | | |
| R1134 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-25C5A/25C5D/25C5R/ 29C5A/29C5D/29C5R) | | | | |
| R1152 | 1-216-035-00 | RES,CHIP | 270 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1153 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1154 | 1-216-067-00 | RES,CHIP | 5.6K 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1160 | 1-216-230-00 | RES,CHIP | 22K 5% 1/8W (KV-25C5B/29C5B) | | | | |
| R1161 | 1-216-190-00 | RES,CHIP | 470 5% 1/8W (KV-25C5B/29C5B) | | | | |
| R1162 | 1-216-061-00 | RES,CHIP | 3.3K 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1163 | 1-216-230-00 | RES,CHIP | 22K 5% 1/8W (KV-25C5B/29C5B) | | | | |
| R1164 | 1-216-073-00 | RES,CHIP | 10K 5% 1/10W (KV-25C5B/25C5E/25C5K/ 29C5B/29C5E/29C5K) | | | | |
| R1165 | 1-216-295-00 | SHORT | 0 (KV-25C5A/25C5D/25C5R/ 29C5A/29C5D/29C5R) | | | | |
| R1167 | 1-216-025-00 | RES,CHIP | 100 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1168 | 1-216-033-00 | RES,CHIP | 220 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1169 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1170 | 1-216-001-00 | RES,CHIP | 10 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1171 | 1-216-045-00 | RES,CHIP | 680 5% 1/10W (KV-25C5B/29C5B) | | | | |
| R1172 | 1-216-190-00 | RES,CHIP | 470 5% 1/8W (KV-25C5B/29C5B) | | | | |
| R1173 | 1-216-049-00 | RES,CHIP | 1K 5% 1/10W (KV-25C5B/29C5B) | | | | |

The components identified by shading and marked Δ are critical for safety
Replace only with the part number specified.

| REF. NO. | PART.NO | DESCRIPTION | REMARK | REF. NO. | PART.NO | DESCRIPTION | REMARK |
|----------|-----------------------|--|--------|--------------|----------------------------------|--|--------|
| | | MISCELLANEOUS ***** | | | | | |
| | Δ 1-406-807-11 | COIL, DEMAGNETIZATION | | 4-204-101-51 | MANUAL, INSTRUCTION | (KV-25C5B/29C5B) (FRENCH/GERMAN/ITALIAN/DUTCH) | |
| | 1-452-032-00 | MAGNET, DISC: 10MM \emptyset | | 4-204-101-11 | MANUAL, INSTRUCTION | (KV-25C5D/29C5D) (GERMAN/GREEK/DUTCH/ENGLISH) | |
| | 1-452-094-00 | MAGNET, ROTATABLE DISK: 15MM \emptyset | | 4-204-101-71 | MANUAL, INSTRUCTION | (KV-25C5E/29C5E) (SPANISH/FINNISH/DANISH/NORWEGIAN/ SWEDISH/HUNGARIAN) | |
| | Δ 8-453-005-21 | NECK ASSY (NA297-M2) (KV-29C5A/29C5B/29C5D/ 29C5E/29C5K/29C5R) | | | | | |
| | Δ 1-453-264-11 | TRANSFORMER ASSY, FLYBACK (NX-1680/U2B4) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | 4-204-101-91 | MANUAL, INSTRUCTION | (KV-25C5K/29C5K) (CZECH/ENGLISH/POLISH/HUNGARIAN) | |
| | Δ 1-453-265-11 | TRANSFORMER ASSY, FLYBACK (NX-1681/U2B4) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | 4-204-102-91 | MANUAL, INSTRUCTION | (KV-25C5R/29C5R) (RUSSIAN/BULGARIAN/ENGLISH) | |
| | 1-505-924-11 | SPEAKER, LOUD (KV-25C5A/25C5B/25C5D/ 25C5E/25C5K/25C5R) | | | REMOTE COMMANDER ***** | | |
| | 1-505-605-11 | SPEAKER, LOUD (KV-29C5A/29C5B/29C5D/ 29C5E/29C5K/29C5R) | | 1-475-765-11 | COMMANDER STANDARD TYPE (RM-883) | | |
| | Δ 1-251-317-31 | CAP ASSY, HIGH-VOLTAGE | | ***** | | | |
| | Δ 1-571-433-21 | SWITCH, PUSH (AC POWER) | | | | | |
| | Δ 1-765-286-11 | CORD, POWER | | | | | |
| | 8-598-361-01 | TUNER (BTP-AC402) (KV-25C5A/25C5D/25C5R/ 29C5A/29C5D/29C5R) | | | | | |
| | 1-693-418-11 | TUNER (TELE9-001A) (KV-25C5B/25C5D/ 29C5B/29C5D) | | | | | |
| | 8-598-432-01 | TUNER (BTP-AC411) (KV-25C5E/25C5K/ 29C5E/29C5K) | | | | | |
| | Δ 8-733-254-05 | PICTURE TUBE (SD-257) (M60LCS60X) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | | | |
| | Δ 8-733-856-05 | PICTURE TUBE (SD-269) (M68LCT60X) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | | | | |
| | Δ 8-451-404-23 | DEFECTION YOKE (Y25GXABA) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | | | |
| | Δ 8-451-467-12 | DEFLECTION YOKE (Y29GXA2B) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | | | | |
| | Δ 8-733-254-76 | ITC (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | | | |
| | ***** | | | | | | |
| | | ACCESSORIES AND PACKING MATERIALS ***** | | | | | |
| | 4-042-476-01 | BAG, PROTECTION (KV-25C5A/25C5B/25C5D/ 25C5E/25C5K/25C5R) | | | | | |
| | 4-029-168-01 | BAG, PROTECTION (KV-29C5A/29C5B/29C5D/ 29C5E/29C5K/29C5R) | | | | | |
| | 4-204-137-01 | INDIVIDUAL CARTON (KV-25C5A/25C5B/25C5D/ 25C5E/25C5K/25C5R) | | | | | |
| | 4-204-115-01 | INDIVIDUAL CARTON (KV-29C5A/29C5B/29C5D/ 29C5E/29C5K/29C5R) | | | | | |
| | 4-203-350-01 | CUSHION (UPPER) (ASSY) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | | | |
| | 4-204-109-01 | CUSHION (UPPER) (ASSY) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | | | | |
| | 4-203-347-01 | CUSHION (LOWER) (ASSY) (KV-25C5A/25C5B/25C5D/25C5E/25C5K/25C5R) | | | | | |
| | 4-204-112-01 | CUSHION (LOWER) (ASSY) (KV-29C5A/29C5B/29C5D/29C5E/29C5K/29C5R) | | | | | |
| | 4-204-101-41 | MANUAL, INSTRUCTION (KV-25C5A/29C5A) (ITALIAN) | | | | | |